

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES

11 POST OFFICE SQUARE (AYOTTE)
AND 75 JOHN ST (DOWNES)
LOWELL, MA 01852

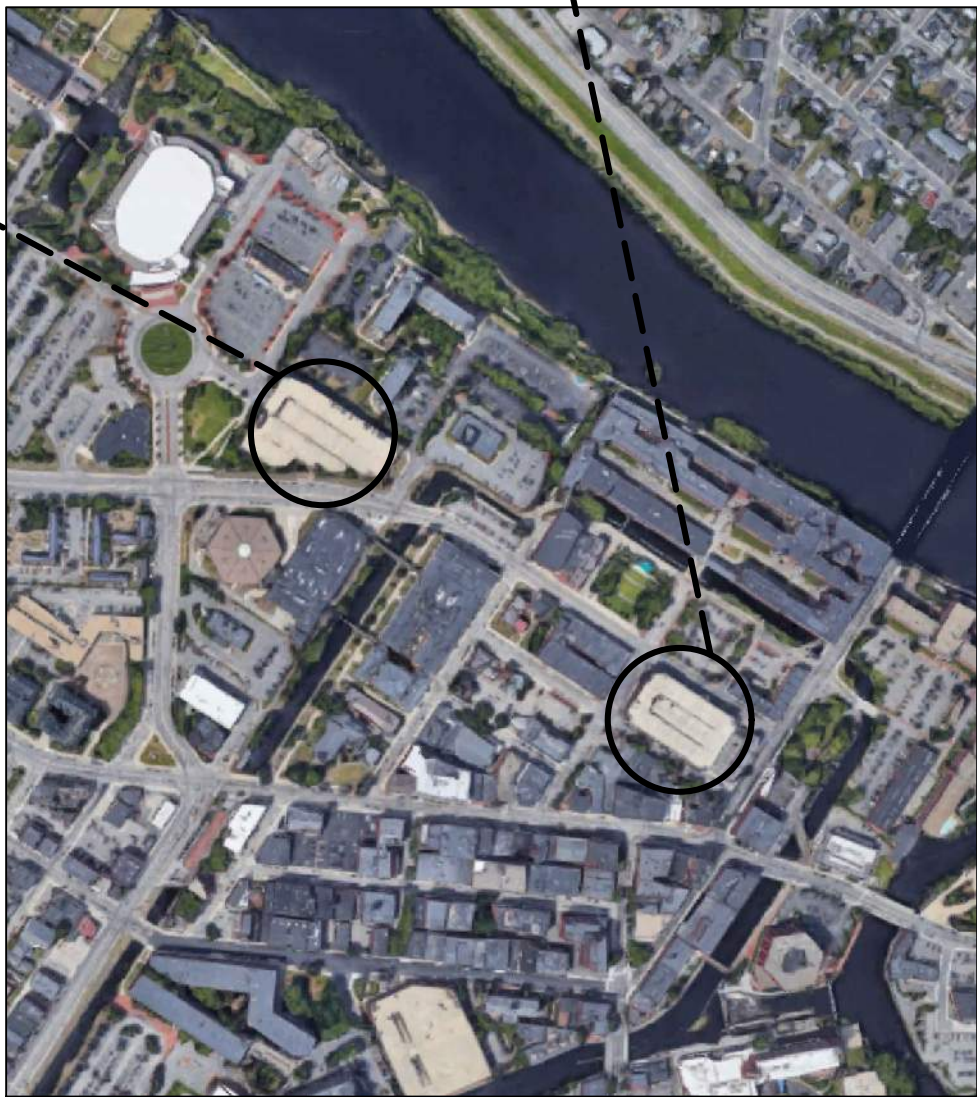
PREPARED FOR
CITY OF LOWELL
CITY HALL
375 MERRIMACK STREET, 3RD FLOOR
LOWELL, MA 01852



GEORGE A. AYOTTE SITE MAP
NOT TO SCALE



JOSEPH M. DOWNES SITE MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

DRAWING NO	TITLE
G100	COVER SHEET
A101	PENTHOUSE ROOF AREA PLANS
A201	JOSEPH M. DOWNES GARAGE ELEVATIONS
A202	JOSEPH M. DOWNES GARAGE ELEVATIONS
A203	JOSEPH M. DOWNES GARAGE ELEVATIONS
A204	JOSEPH M. DOWNES GARAGE ELEVATIONS
A205	JOSEPH M. DOWNES GARAGE ELEVATIONS
A206	JOSEPH M. DOWNES GARAGE PENTHOUSE & HIDDEN ELEVATIONS
A207	JOSEPH M. DOWNES GARAGE ELEVATIONS
A208	GEORGE A. AYOTTE GARAGE ELEVATIONS
A209	GEORGE A. AYOTTE GARAGE ELEVATIONS
A210	GEORGE A. AYOTTE GARAGE ELEVATIONS
A211	GEORGE A. AYOTTE GARAGE PENTHOUSE ELEVATIONS
A212	GEORGE A. AYOTTE GARAGE PENTHOUSE ELEVATIONS
A213	GEORGE A. AYOTTE GARAGE PENTHOUSE ELEVATIONS
A214	GEORGE A. AYOTTE GARAGE PENTHOUSE ELEVATIONS
A215	JOSEPH M. DOWNES GARAGE STOREFRONT ELEVATIONS
A501	ROOF DETAILS
A502	ROOF DETAILS
A503	ROOF DETAILS
A701	MASONRY DETAILS
A801	STOREFRONT DETAILS
A802	STOREFRONT DETAILS
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S104	JOSEPH M. DOWNES GARAGE UNDERSIDE OF SECOND LEVEL PLAN
S105	JOSEPH M. DOWNES GARAGE SECOND LEVEL PLAN

DRAWING NO	TITLE
S106	JOSEPH M. DOWNES GARAGE UNDERSIDE OF THIRD LEVEL PLAN
S107	JOSEPH M. DOWNES GARAGE THIRD LEVEL PLAN
S108	JOSEPH M. DOWNES GARAGE GARAGE UNDERSIDE OF FOURTH LEVEL PLAN
S109	JOSEPH M. DOWNES GARAGE FOURTH LEVEL PLAN
S110	JOSEPH M. DOWNES GARAGE UNDERSIDE OF FIFTH LEVEL PLAN
S111	JOSEPH M. DOWNES GARAGE FIFTH LEVEL PLAN
S112	JOSEPH M. DOWNES GARAGE UNDERSIDE OF ROOF LEVEL PLAN
S113	JOSEPH M. DOWNES GARAGE SIXTH LEVEL PLAN
S114	GEORGE A. AYOTTE GARAGE GROUND FLOOR PLAN
S115	GEORGE A. AYOTTE GARAGE UNDERSIDE OF SECOND FLOOR PLAN
S116	GEORGE A. AYOTTE GARAGE SECOND FLOOR PLAN
S117	GEORGE A. AYOTTE GARAGE UNDERSIDE OF THIRD FLOOR PLAN
S118	GEORGE A. AYOTTE GARAGE THIRD FLOOR PLAN
S119	GEORGE A. AYOTTE GARAGE UNDERSIDE OF FOURTH FLOOR PLAN
S120	GEORGE A. AYOTTE GARAGE FOURTH FLOOR PLAN
S121	GEORGE A. AYOTTE GARAGE UNDERSIDE OF FIFTH FLOOR PLAN
S122	GEORGE A. AYOTTE GARAGE FIFTH FLOOR PLAN
S123	GEORGE A. AYOTTE GARAGE UNDERSIDE OF SIXTH FLOOR PLAN
S124	GEORGE A. AYOTTE GARAGE SIXTH FLOOR PLAN
S501	STRUCTURAL DETAILS
S502	STRUCTURAL DETAILS
S503	STRUCTURAL DETAILS
S504	JOSEPH M. DOWNES GARAGE TEMPORARY SHORING DETAIL
E000	ELECTRICAL LEGEND & GENERAL NOTES
E101	DOWNES GARAGE - LEVEL 1 - ELECTRICAL PLAN
E102	AYOTTE GARAGE - LEVEL 2 - ELECTRICAL PLAN



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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 G100		
DESIGNED BY	KMC/JVL		
DRAWN BY	KMC/JVL		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

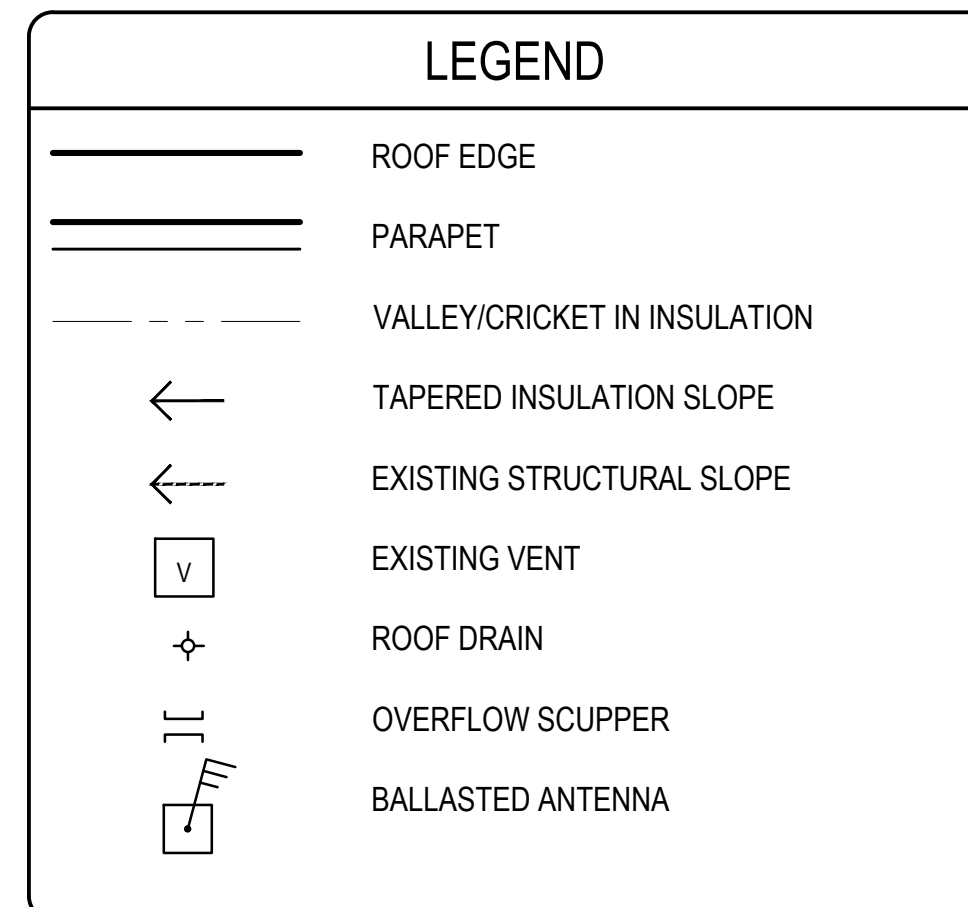
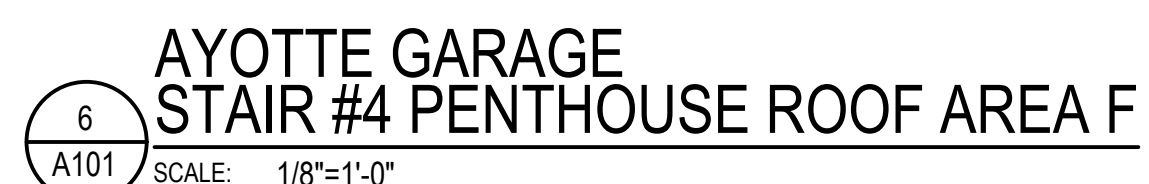
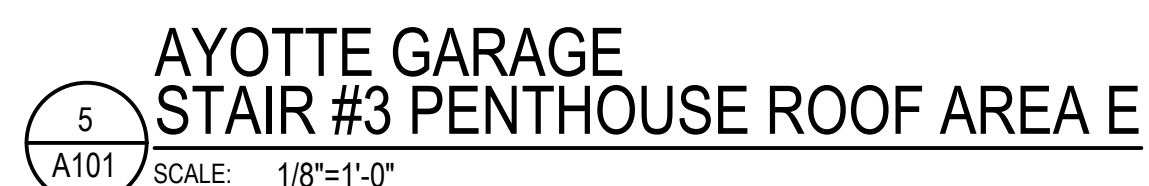
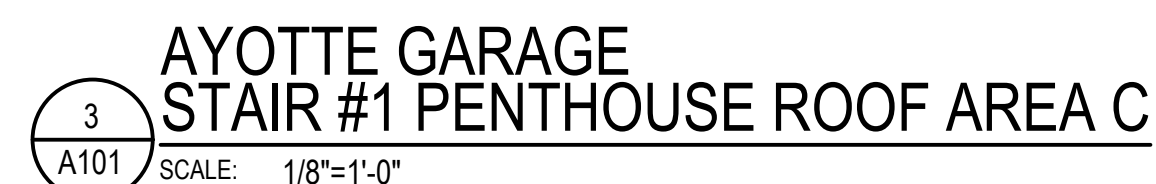
GRAPHIC SCALE

SHEET TITLE

COVER SHEET

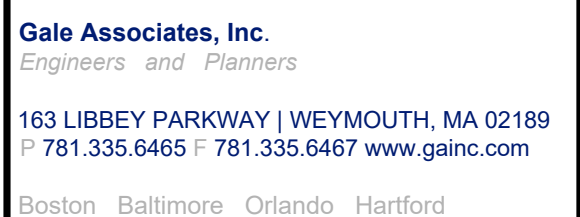
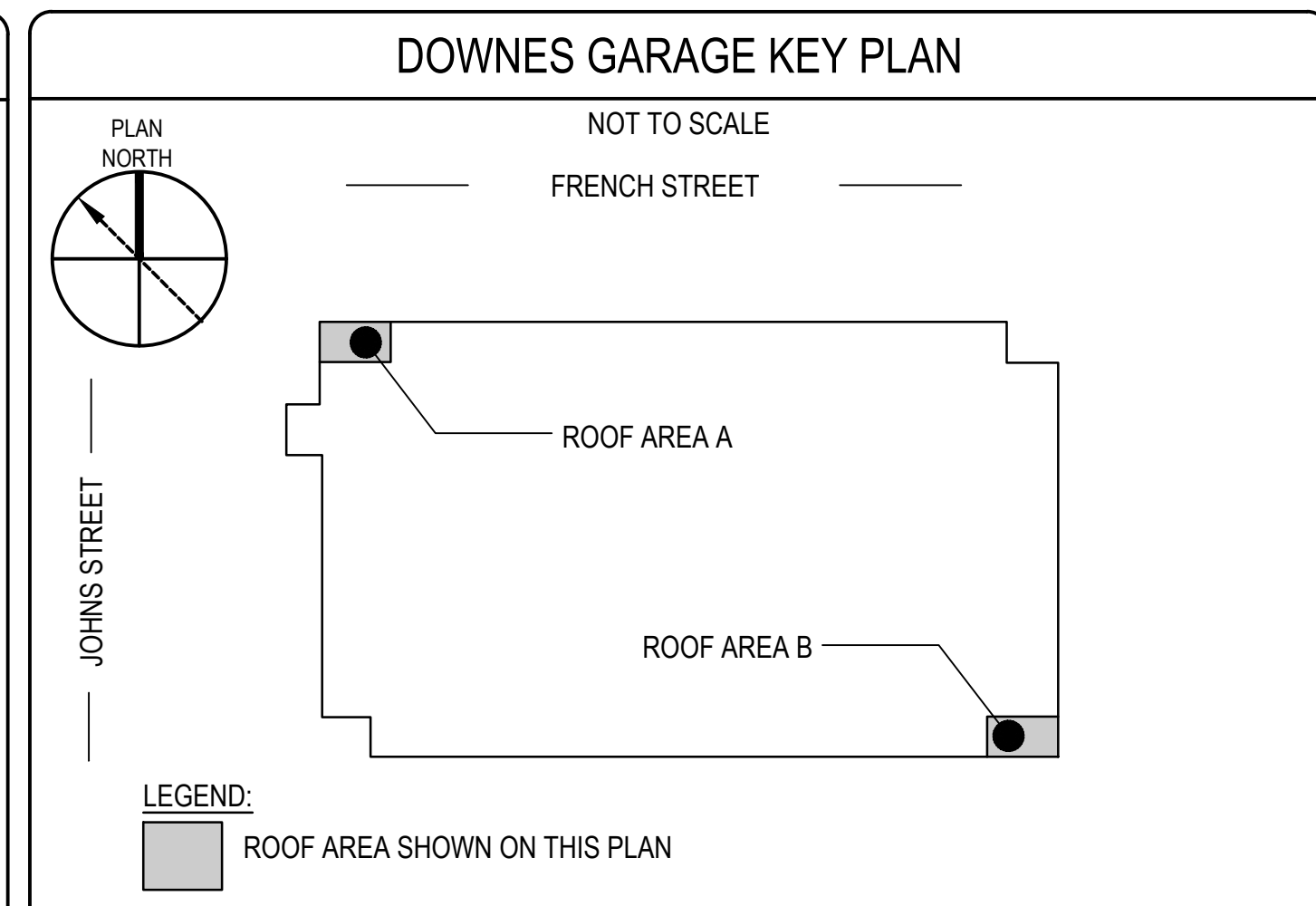
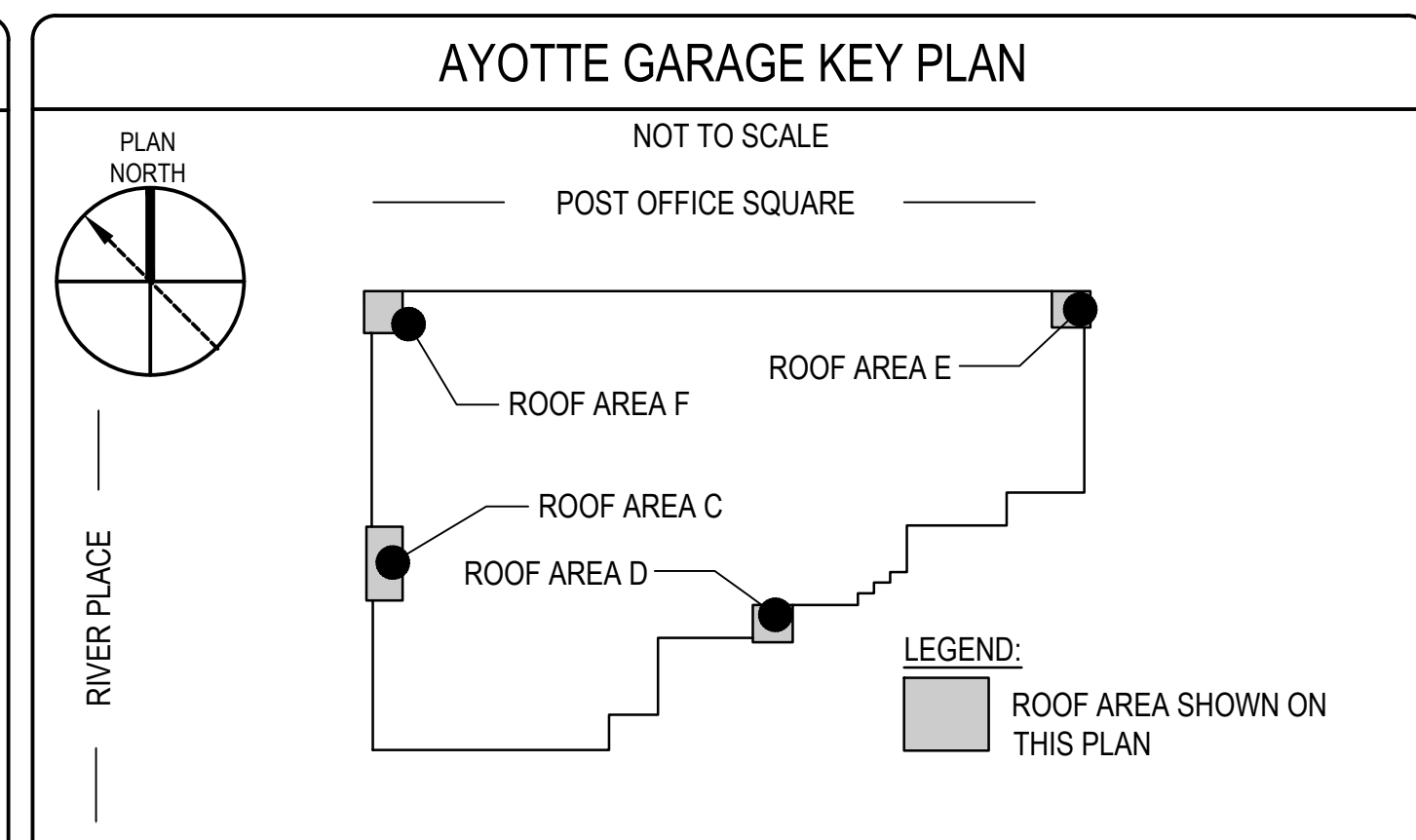
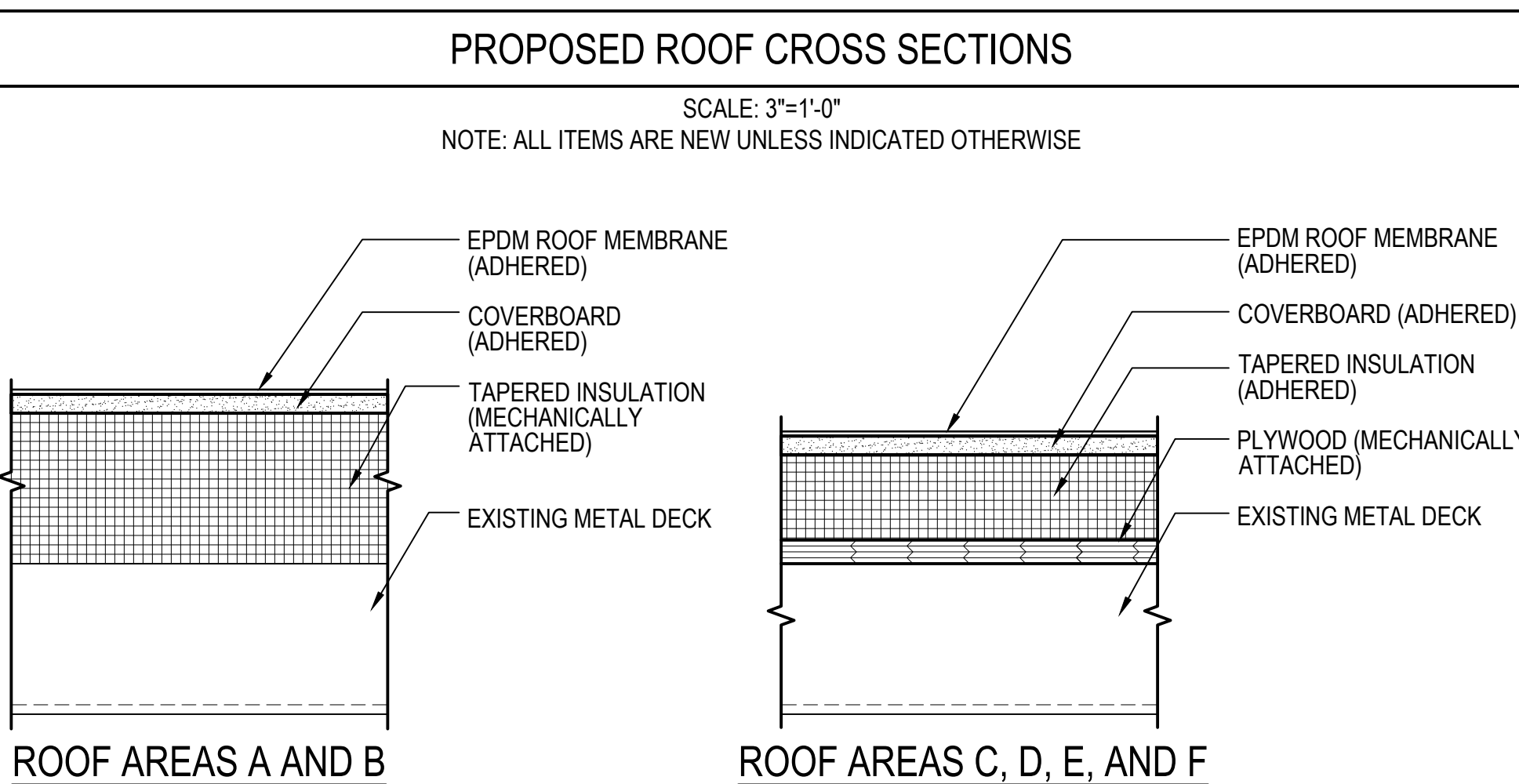
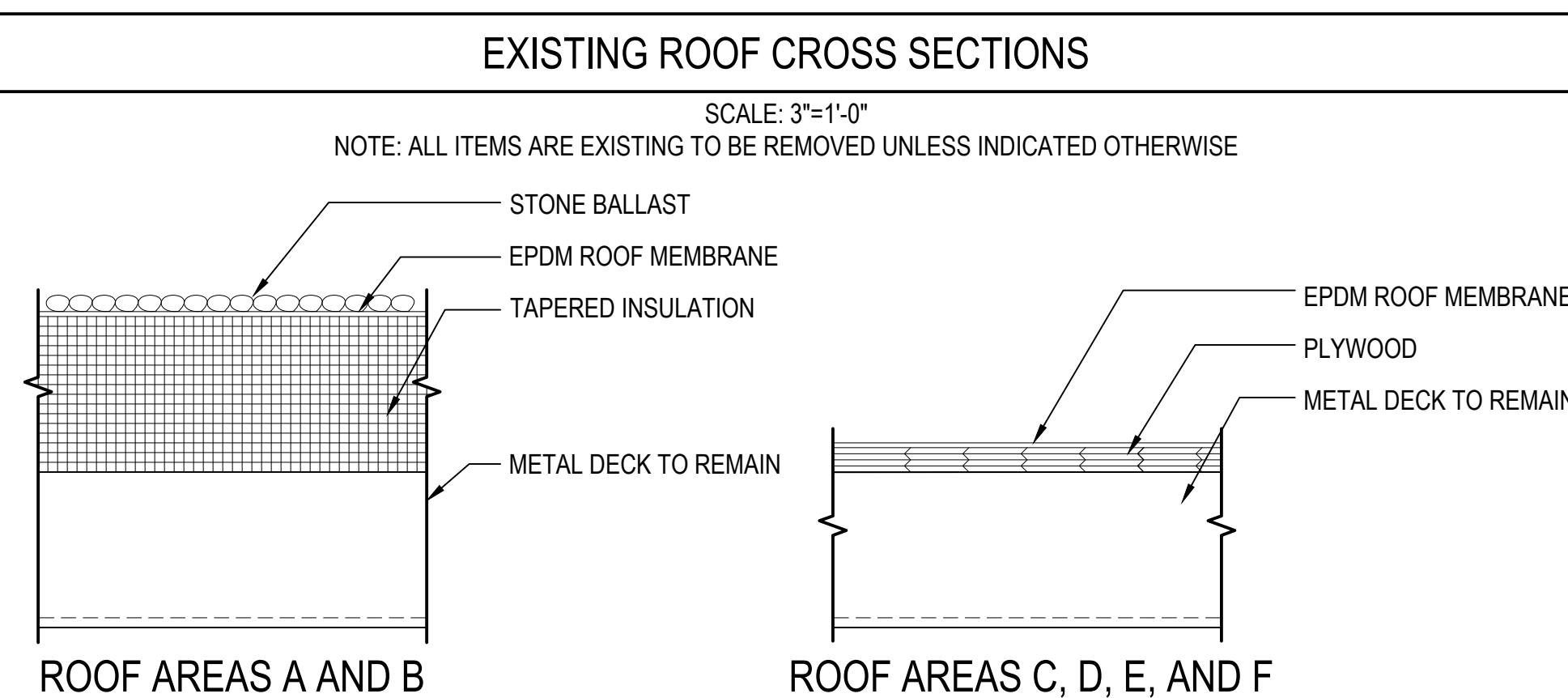
DRAWING NO.

G100



- ## ROOFING NOTES
1. ROOFING AND FLASHING SHALL BE 100% WEATHER TIGHT ON A DAILY BASIS.
 2. REMOVE ONLY AS MUCH ROOFING AS CAN BE REPLACED ON THE SAME DAY. NO PHASED CONSTRUCTION IS ALLOWED.
 3. DISCONNECT, REMOVE, RAISE, REINSTALL AND RECONNECT EXISTING ROOFTOP EQUIPMENT AND ASSOCIATED MECHANICAL/ELECTRICAL PENETRATIONS TO PROVIDE MINIMUM SPECIFIED FLASHING HEIGHTS.
 4. CONTRACTOR TO VERIFY WITH BUILDING OWNER THE STATUS OF ALL HVAC, MECHANICAL UNITS, AND RELATED ROOFTOP PENETRATIONS. ALL ABANDONED ROOFTOP EQUIPMENT, STACKS, WOOD SLEEPERS, ETC., SHALL BE REMOVED AND LEGALLY DISPOSED OF. ALL ABANDONED CURBS SHALL BE REMOVED - EXISTING ROOF DECK SHALL BE PATCHED AND REPAIRED AND PREPARED TO RECEIVE NEW ROOFING SYSTEM.
 5. FURNISH AND INSTALL NEW REPLACEMENT ROOF DRAINS ON ALL EXISTING ROOF DRAINS - TYPICAL. SEE DETAIL 3/A501.
 6. WIRE BRUSH CLEAN AND MAKE FREE OF ALL RUST AND CONTAMINANTS ALL EXPOSED STEEL, STEEL SUPPORTS, VENT PIPES, GAS PIPES AND RELATED PIPE FITTINGS. PRIME SURFACES AND APPLY CONTINUOUS ZINC RICH RUST PROOF COATING - SEE JOB AND COATING MANUFACTURER'S SPECIFICATIONS.
 7. RESECU ALL PIPES, CONDUITS, ETC. REPLACE ALL FAILED, DETERIORATING, AND MISSING FASTENERS, REMOVE AND REPLACE ALL DETERIORATED SLEEPERS WITH NEW PRESSURE TREATED WOOD SLEEPERS. RELOCATE PIPE SUPPORTS AND SLEEPERS AS REQUIRED TO PROVIDE PROPER ATTACHMENT OF THE FASTENERS AND SUPPORT TO THE PIPES - TYPICAL.
 8. NEW COPING AND FASCIA SYSTEM SHALL BE PRE FINISHED (COLOR TO BE SELECTED BY THE OWNER FROM MANUFACTURER'S STANDARD FINISH COLORS - TO MATCH EXISTING) AND SHALL BE .040 ALUMINUM IN LENGTHS OF 10'-0", STANDARD WIDTHS AND HEIGHTS, AND SHALL MEET ALL WALL CONDITIONS AS INDICATED AND ENCOUNTERED - TYPICAL.

- ## TAPERED INSULATION LAYOUT NOTES
1. CONCEPTUAL TAPERED INSULATION LAYOUT TO PROVIDE MINIMUM INSULATION HEIGHTS AT ROOF TO WALL AND PERIMETER LOCATIONS. SPECIFIC TAPERED LAYOUT TO BE DEVELOPED BY CONTRACTOR IN CONJUNCTION WITH INSULATION SUPPLIER.
 2. ADJUSTMENTS TO WOOD BLOCKING HEIGHTS AND CONFIGURATIONS OF FLASHINGS TO CONFORM TO TAPERED INSULATION LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL COSTS WILL BE ALLOWED TO THE CONTRACTOR IF PROPOSED DETAIL CONFIGURATIONS ARE ALTERED.
 3. ALL ROOF PENETRATIONS ARE NOT SHOWN ON THIS CONCEPTUAL LAYOUT; PROVIDE CRICKETS BEHIND UNITS TO PROMOTE DRAINAGE. CONTRACTOR TO VERIFY EXISTING ROOF DECK SLOPE AS THE WORK PROGRESSES.
 4. THE STRUCTURAL SLOPE AT ROOF AREAS TO RECEIVE 1/4" PER FOOT TAPERED INSULATION (ROOF AREAS A, B, C, D, E, F) IS ASSUMED TO BE ZERO. FIELD MODIFICATIONS MAY BE REQUIRED TO PREVENT PONDING.
 5. ANY PONDING WATER ENCOUNTERED AFTER THE INSTALLATION OF THE NEW ROOF SYSTEM WILL BE ADDRESSED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. PONDING WATER SHALL BE DEFINED AS 1/2" OF STANDING WATER WITHIN A 100 SQUARE FOOT AREA AFTER A 24 HOUR PERIOD.
 6. REVIEW OF THE EXPOSED ROOF DECKS BY THE CONTRACTOR WILL BE REQUIRED PRIOR TO PLACEMENT OF THE INSULATION SYSTEM TO DETERMINE POTENTIAL UNFORESEEN LOW AREAS.



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PROJECT

RENOVATION AND REPAIR OF GEORGE A.
MAYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

[illegible]

NO.	DATE	DESCRIPTION	BY
PROJECT NO.		837920	
CADD FILE		837920 A100s	
DESIGNED BY		JVL	
DRAWN BY		JVL	
CHECKED BY		AEQ/ACP	
DATE		2/22/2022	
DRAWING SCALE		1/8"=1'-0"	

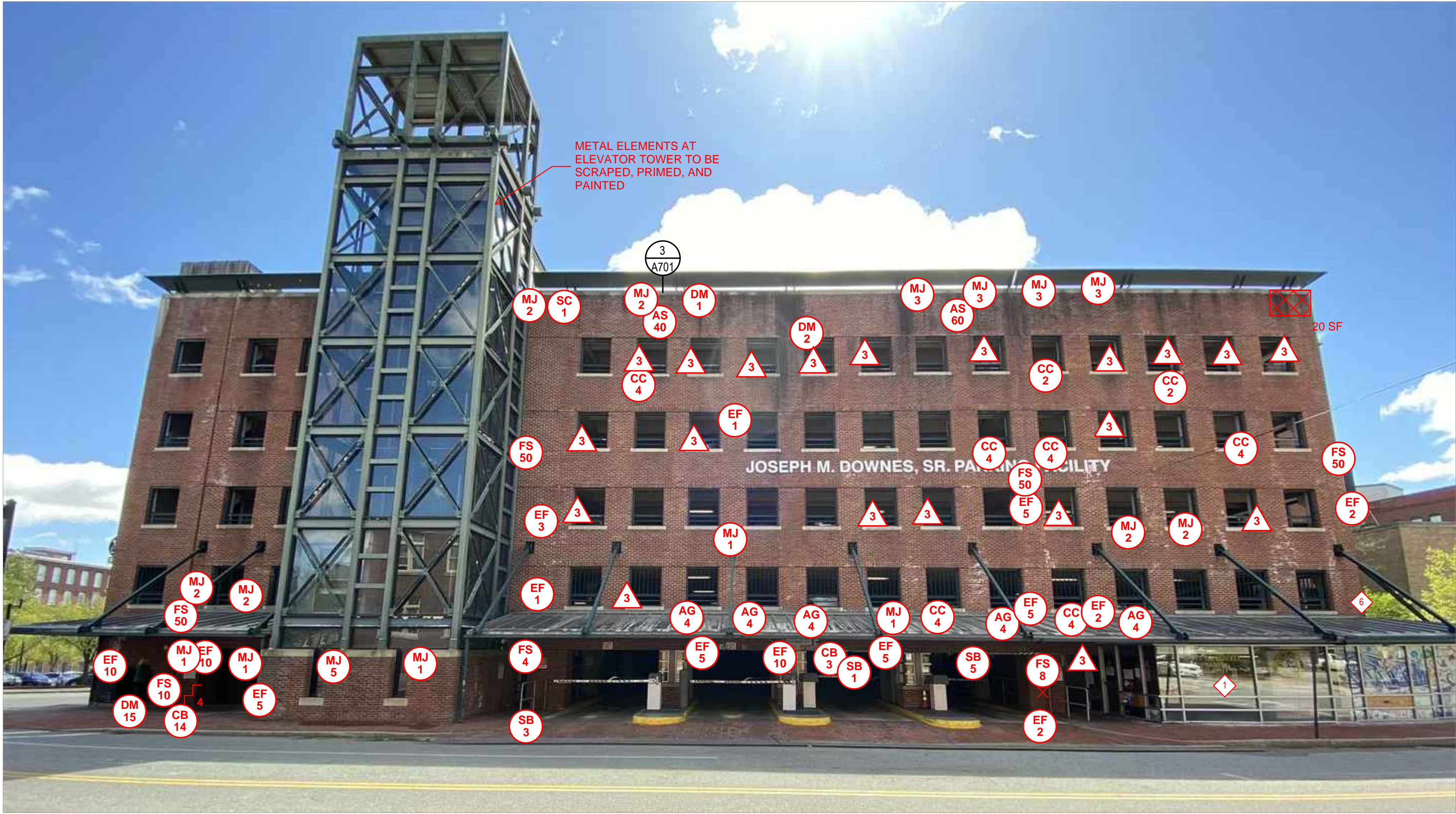
GRAPHIC SCALE

4' 8' 16'

PENTHOUSE ROOF AREA PLANS

DRAWING NO.

A101



1 A201 JOSEPH M. DOWNES WEST ELEVATION
SCALE: NOT TO SCALE

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.

ELEVATION NOTES

- THE INFORMATION SHOWN ON THIS DRAWING HAS BEEN COMPILED FROM VARIOUS SOURCES, AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION.
- DISCREPANCIES NOTED BY THE CONTRACTOR IN THE DRAWINGS OR SPECIFICATIONS MUST BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO BID SUBMISSION.
- THE DEFECTS NOTED INDICATE APPROXIMATE LOCATIONS. THEY ARE NOT INTENDED TO DEFINE LIMITS OF WORK.

REPAIR LEGEND

MASONRY

- | | | | |
|---------|--|---------|--|
| CB
| CRACKED BRICK TO BE REPLACED;
INDICATES UNITS | EF
| EFFLORESCENCE TO BE CLEANED;
INDICATES SQUARE FEET |
| SB
| SPALLED BRICK TO BE REPLACED;
INDICATES UNITS | VG
| VEGETATIVE GROWTH TO BE CLEANED;
INDICATES SQUARE FEET |
| DM
| DETERIORATED MORTAR JOINT TO BE
REPOINTED, REFER TO DETAIL 1/A701;
INDICATES SQUARE FEET | AG
| ALGAE GROWTH TO BE CLEANED;
INDICATES SQUARE FEET |
| MJ
| DETERIORATED MORTAR JOINT TO BE
REPOINTED, REFER TO DETAIL 1/A701;
INDICATES LINEAR FEET | RS
| RUST STAINING TO BE CLEANED;
INDICATES SQUARE FEET |
| | STEP CRACK TO BE REPAIRED
(APPROXIMATE SCALE);
INDICATES LINEAR FEET | AS
| ATMOSPHERIC STAINING TO BE
CLEANED; # INDICATES SQUARE FEET |
| | | ✕ | EXISTING ANCHOR/METAL STUB TO BE
REMOVED AND VOID IN BRICK OR
MORTAR TO BE PATCHED |

CONCRETE

- | | |
|---------|---|
| CC
| CRACKED CONCRETE, REFER TO
DETAIL 4/S501;
INDICATES LINEAR FEET |
| DC
| DELAMINATING CONCRETE, REFER TO
DETAIL 1/S501;
INDICATES SQUARE FEET |
| SC
| SPALLED CONCRETE, REFER TO DETAIL
1/S501; # INDICATES SQUARE FEET
D = DEEP SPALL, REFER TO DETAIL
2/S501 |

SEALANTS

- | | |
|---------|--|
| PS
| FAILED PERIMETER SEALANT TO BE
REPAIRED, REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET |
| FS
| FAILED SEALANT TO BE REPAIRED,
REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET |

PAINT

- | | |
|---|---|
| △ | CLASS 3 PAINT DEFECT (PEELING PAINT);
SUBSTRATE TO BE SCRAPPED, PRIMED,
AND PAINTED |
|---|---|

SHEET NOTES

- | | |
|---|---------------------------------------|
| ◇ | DEFECT NOTE;
REFER TO REPAIR NOTES |
|---|---------------------------------------|

NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET

REPAIR NOTES

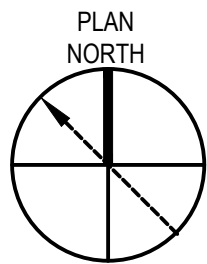
- | | |
|---|--|
| 1 | REMOVE AND REPLACE EXISTING STOREFRONT; REFER TO A800s |
| 2 | CONCRETE AND BRICK MASONRY STAIRS AT GARAGE ENTRANCE TO BE REBUILT |
| 3 | SHIFTED STONE TO BE REMOVED AND RESET IN PLACE |
| 4 | BRICK MASONRY TYPICALLY SPALLED; REBUILD BOTTOM THREE (3) COURSES;
APPROXIMATELY 1,000 SF |
| 5 | DISPLACED/MISSING GASKET TO BE REPLACED; APPROXIMATELY 10 LF |
| 6 | INSTALL NEW THROUGHWALL FLASHING AT SOUTHWEST CORNER ABOVE METAL ROOF;
APPROXIMATELY 8 LF. REFER TO DETAIL 5/A701 |
| 7 | REMOVE AND REPLACE EXISTING PENTHOUSE METAL WALL PANELS; REFER TO A500s |

NOTE: REMOVE, TAG, STORE, AND REINSTALL EXISTING CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL AT THE JOSEPH M. DOWNES GARAGE. REPLACE DETERIORATED CAPSTONES TO MATCH EXISTING. REFER TO DETAIL 3/A701.

NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.

KEY PLAN

NOT TO SCALE



◇ ELEVATION SHOWN ON THIS PLAN



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FACILITIES IN LOWELL, MA

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PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	ERS		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

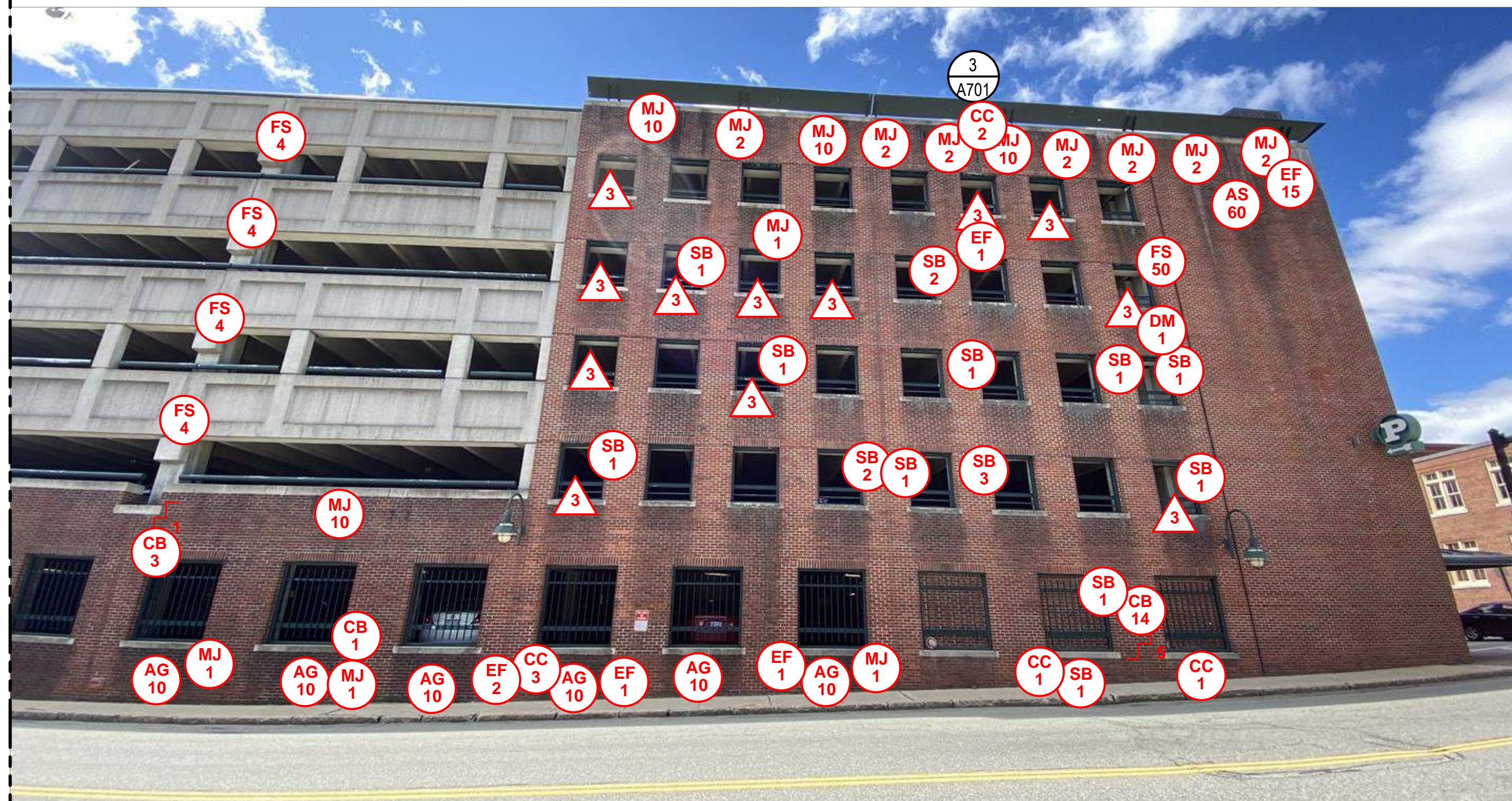
GRAPHIC SCALE

SHEET TITLE

JOSEPH M.
DOWNES GARAGE
ELEVATIONS

DRAWING NO.

A201



3 JOSEPH M. DOWNES PARTIAL NORTH ELEVATION
A202 SCALE: NOT TO SCALE

PLAN NORTH

NOT TO SCALE

3

2

MATCH 3/A202

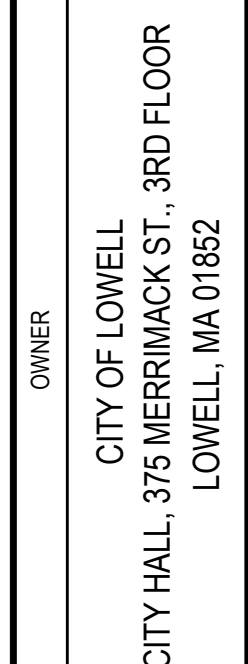
MATCH 2/A202

ELEVATION SHOWN ON THIS PLAN

SHEET NOTES

- NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.

 ELEVATION SHOWN ON THIS PLAN

[illegible]

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PROJECT NO.		837920	
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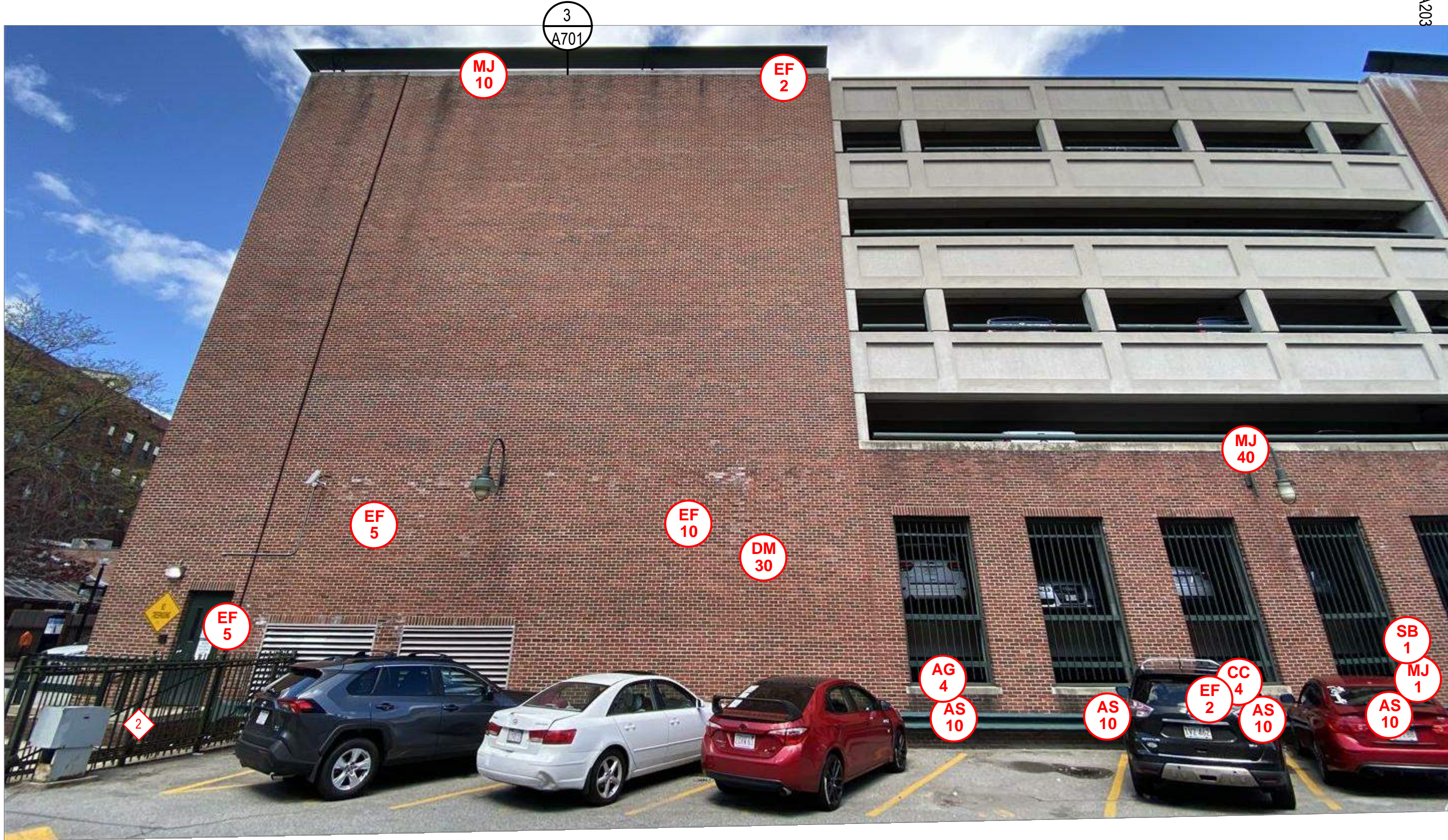
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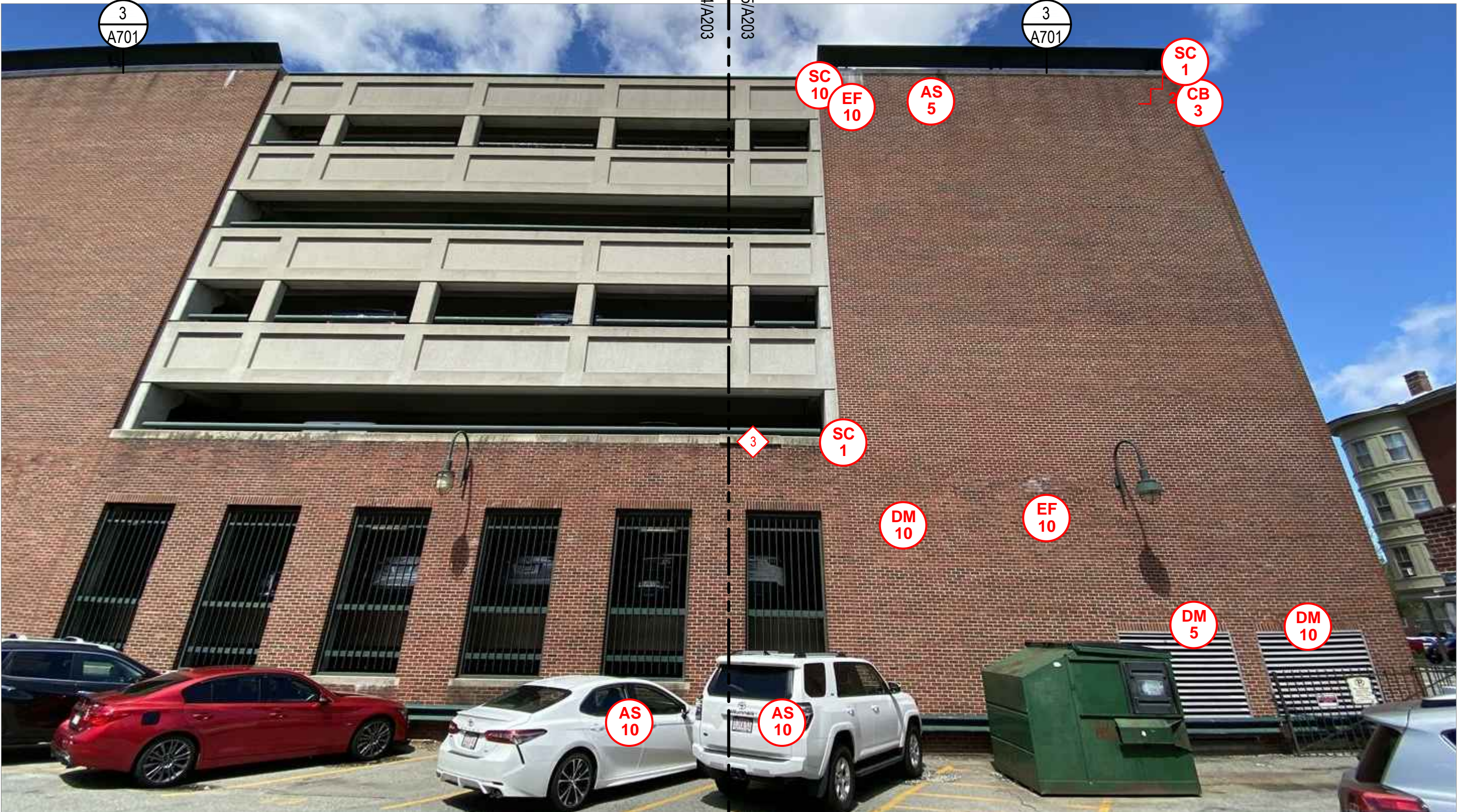
JOSEPH M.
DOWNES GARAGE
ELEVATIONS

DRAWING NO.

A202



4 A203 JOSEPH M. DOWNES PARTIAL EAST ELEVATION
SCALE: NOT TO SCALE



5 A203 JOSEPH M. DOWNES PARTIAL EAST ELEVATION
SCALE: NOT TO SCALE

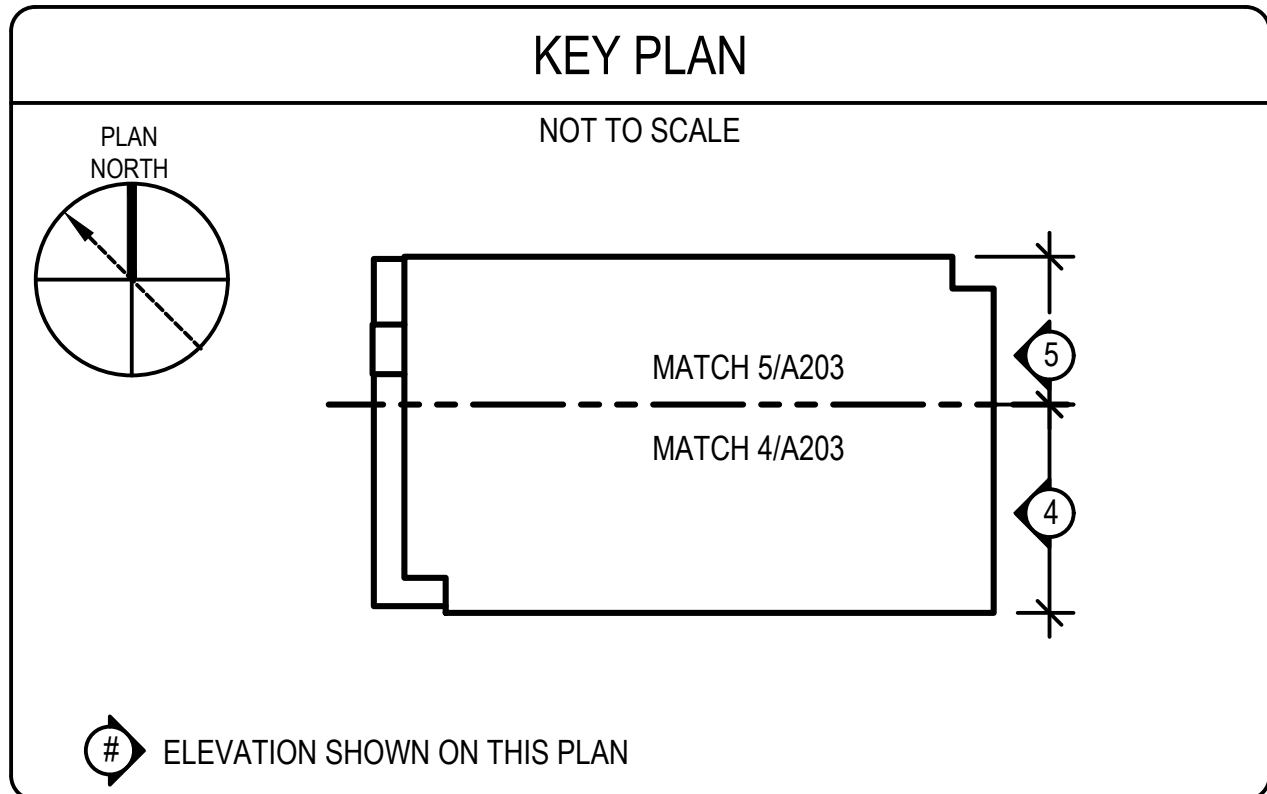
- ELEVATION NOTES
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REPAIR LEGEND	
MASONRY	
CRACKED BRICK TO BE REPLACED; # INDICATES UNITS	EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET
SPALLED BRICK TO BE REPLACED; # INDICATES UNITS	VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET	ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET	RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET
STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET	ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET
EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED	
CONCRETE	
CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET	BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET
DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET	
SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET D = DEEP SPALL, REFER TO DETAIL 2/S501	FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
	FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
PAINT	
CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED	DEFECT NOTE; REFER TO REPAIR NOTES
NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET	

- REPAIR NOTES
- REMOVE AND REPLACE EXISTING STOREFRONT; REFER TO A800s
 - CONCRETE AND BRICK MASONRY STAIRS AT GARAGE ENTRANCE TO BE REBUILT
 - SHIFTED STONE TO BE REMOVED AND RESET IN PLACE
 - BRICK MASONRY TYPICALLY SPALLED; REBUILD BOTTOM THREE (3) COURSES; APPROXIMATELY 1,000 SF
 - DISPLACED/MISSING GASKET TO BE REPLACED; APPROXIMATELY 10 LF
 - INSTALL NEW THROUGHWALL FLASHING AT SOUTHWEST CORNER ABOVE METAL ROOF; APPROXIMATELY 8 LF. REFER TO DETAIL 5/A701
 - REMOVE AND REPLACE EXISTING PENTHOUSE METAL WALL PANELS; REFER TO A500s

NOTE: REMOVE, TAG, STORE, AND REINSTALL EXISTING CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL AT THE JOSEPH M. DOWNES GARAGE. REPLACE DETERIORATED CAPSTONES TO MATCH EXISTING. REFER TO DETAIL 3/A701.

NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.



NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.



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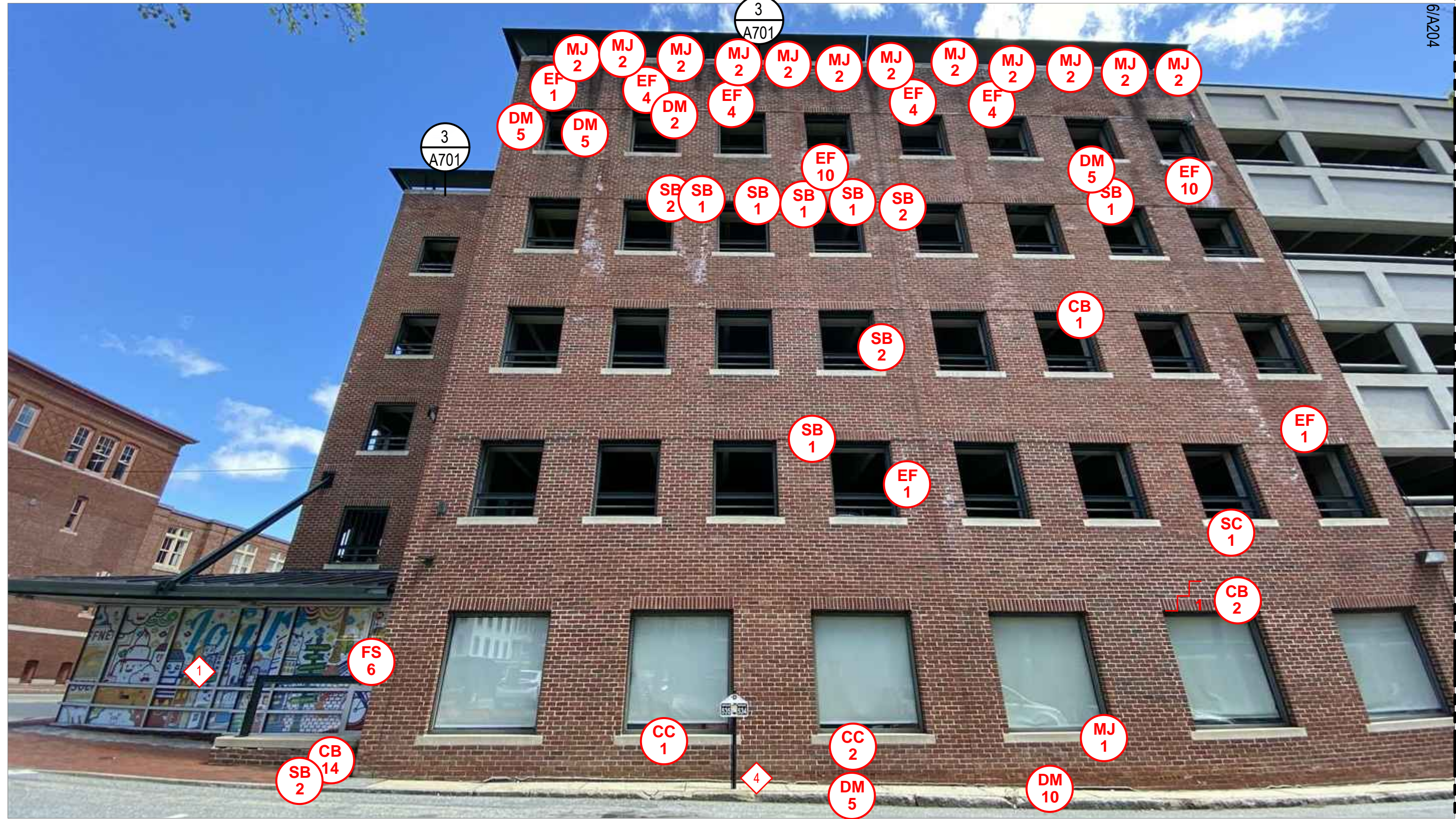
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	CITY OF LOWELL CITY HALL, 375 MERRIMACK ST., 3RD FLOOR LOWELL, MA 01852	
OWNER		

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DRAWING SCALE		NOT TO SCALE	

GRAPHIC SCALE	
SHEET TITLE	
JOSEPH M. DOWNES GARAGE ELEVATIONS	
DRAWING NO.	A203



6 A204 JOSEPH M. DOWNES PARTIAL SOUTH ELEVATION
SCALE: NOT TO SCALE



7 A204 JOSEPH M. DOWNES PARTIAL SOUTH ELEVATION
SCALE: NOT TO SCALE

ELEVATION NOTES

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3. THE DEFECTS NOTED INDICATE APPROXIMATE LOCATIONS. THEY ARE NOT INTENDED TO DEFINE LIMITS OF WORK.

REPAIR LEGEND

MASONRY

CB #	CRACKED BRICK TO BE REPLACED; # INDICATES UNITS	EF #	EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET
SB #	SPALLED BRICK TO BE REPLACED; # INDICATES UNITS	VG #	VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
DM #	DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET	AG #	ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
MJ #	DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET	RS #	RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET
STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET		AS #	ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET
		✕	EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED

CONCRETE

CC #	CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET
DC #	DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET
SC #	SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET D = DEEP SPALL, REFER TO DETAIL 2/S501

BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET

SEALANTS

PS #	FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
FS #	FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET

PAINT

△	CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED
---	---

SHEET NOTES

◆	DEFECT NOTE; REFER TO REPAIR NOTES
---	---------------------------------------

NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET

REPAIR NOTES

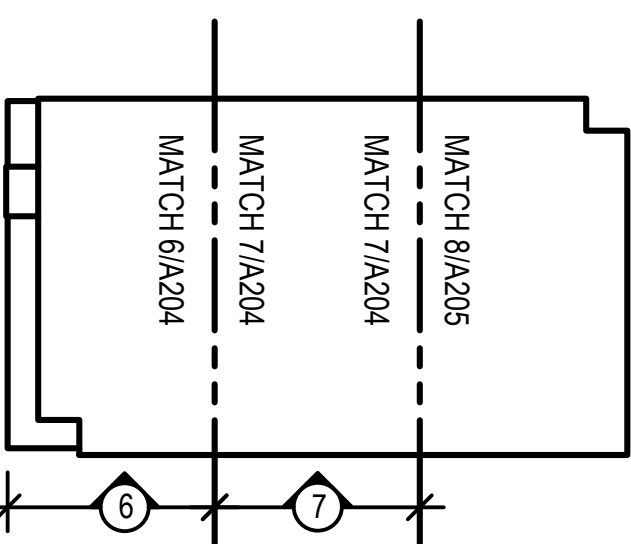
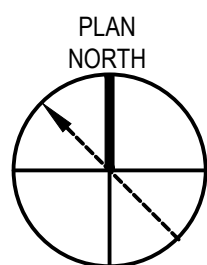
1. REMOVE AND REPLACE EXISTING STOREFRONT; REFER TO A800s
2. CONCRETE AND BRICK MASONRY STAIRS AT GARAGE ENTRANCE TO BE REBUILT
3. SHIFTED STONE TO BE REMOVED AND RESET IN PLACE
4. BRICK MASONRY TYPICALLY SPALLED; REBUILD BOTTOM THREE (3) COURSES;
APPROXIMATELY 1,000 SF
5. DISPLACED/MISSING GASKET TO BE REPLACED; APPROXIMATELY 10 LF
6. INSTALL NEW THROUGHWALL FLASHING AT SOUTHWEST CORNER ABOVE METAL ROOF;
APPROXIMATELY 8 LF. REFER TO DETAIL 5/A701
7. REMOVE AND REPLACE EXISTING PENTHOUSE METAL WALL PANELS; REFER TO A500s

NOTE: REMOVE, TAG, STORE, AND REINSTALL EXISTING CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL AT THE JOSEPH M. DOWNES GARAGE. REPLACE DETERIORATED CAPSTONES TO MATCH EXISTING. REFER TO DETAIL 3/A701.

NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.

KEY PLAN

NOT TO SCALE



◆ ELEVATION SHOWN ON THIS PLAN

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.



Gale Associates, Inc.
Engineers and Planners
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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	ERS		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

GRAPHIC SCALE

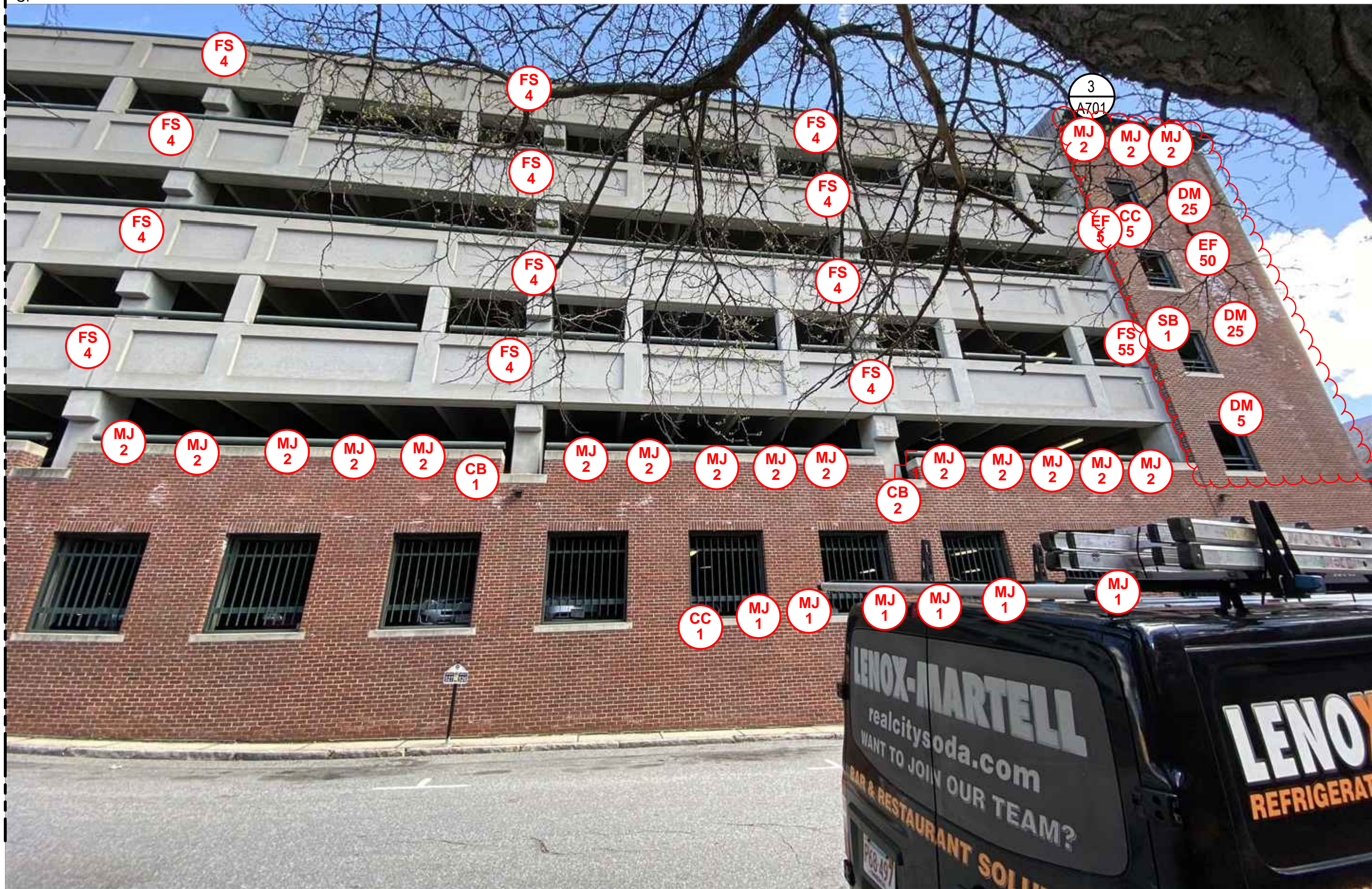
SHEET TITLE

JOSEPH M.
DOWNES GARAGE
ELEVATIONS

DRAWING NO.

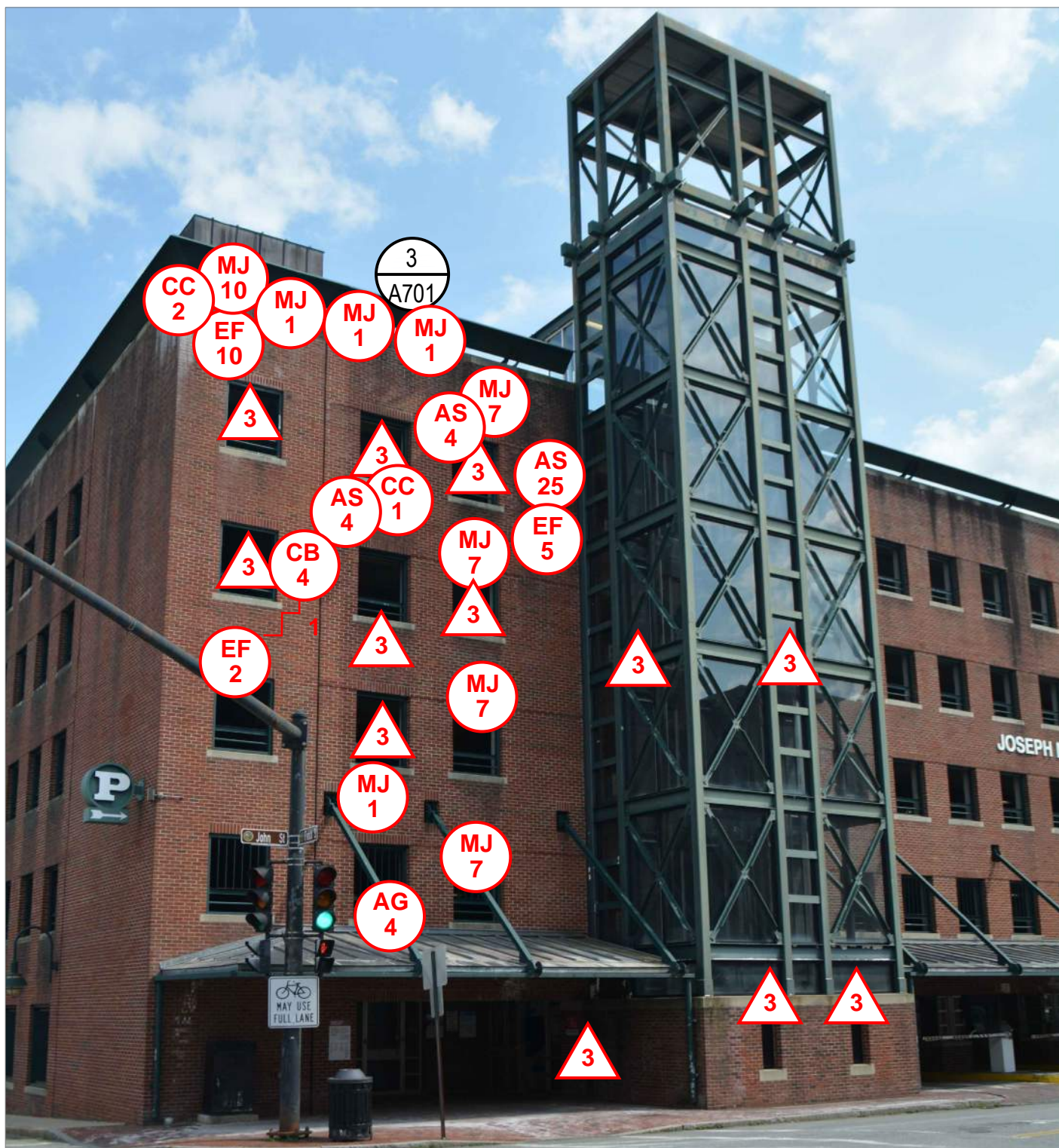
A204

MATCH 8/A205
MATCH 7/A204

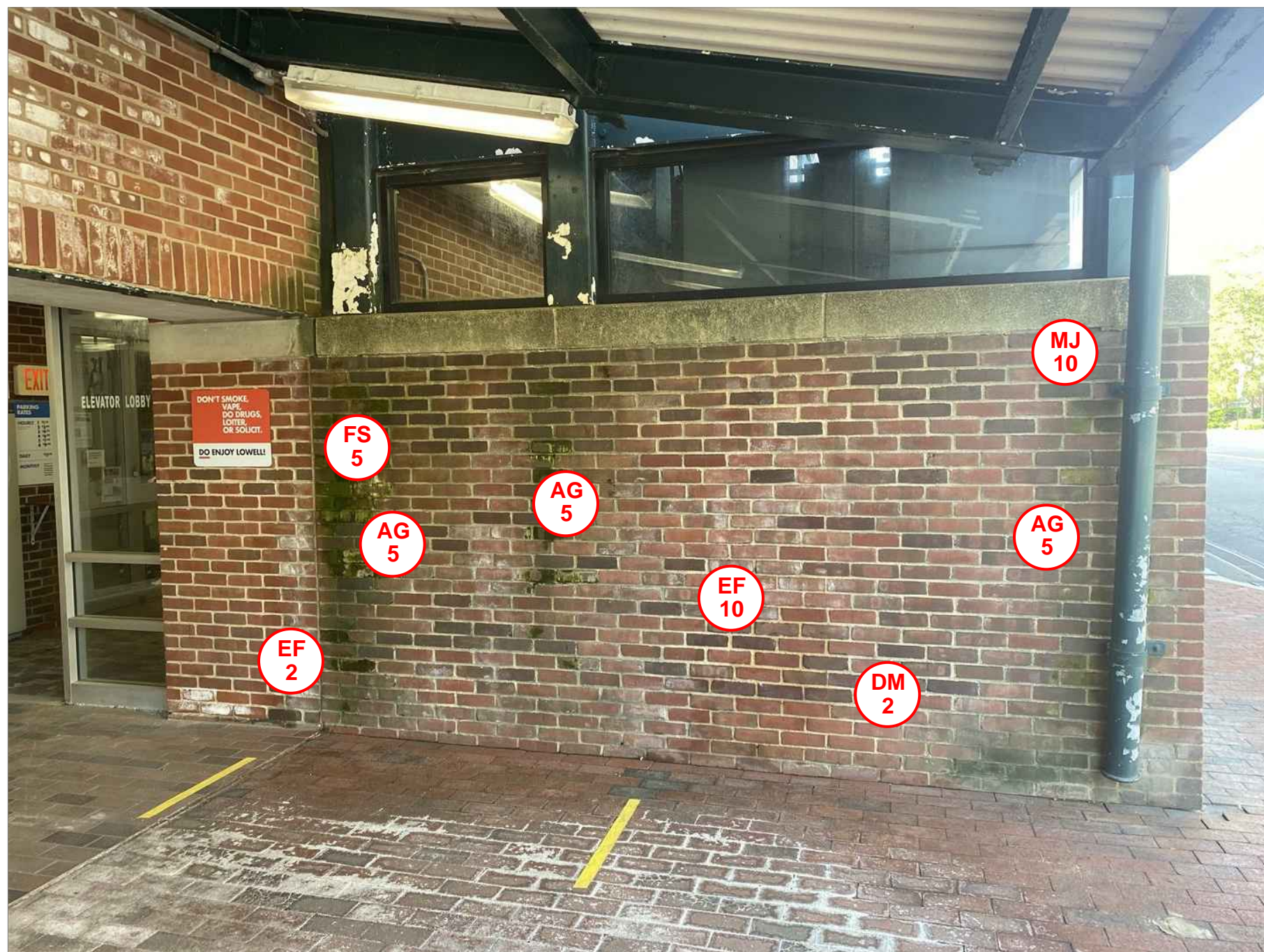


SECTION OF DISPLACED BRICK MASONRY WALL. INSTALL HELICAL TIES TO RESECURE DISPLACED MASONRY VENEER. APPROXIMATELY 500 SF. REFER TO DETAIL 4/A701

8 JOSEPH M. DOWNES PARTIAL SOUTH ELEVATION
A205 SCALE: NOT TO SCALE



9 JOSEPH M. DOWNES PARTIAL WEST ELEVATION
A205 SCALE: NOT TO SCALE



10 JOSEPH M. DOWNES HIDDEN ELEVATION
A205 SCALE: NOT TO SCALE

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.

ELEVATION NOTES

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REPAIR LEGEND

MASONRY

- CB # CRACKED BRICK TO BE REPLACED; # INDICATES UNITS
- SB # SPALLED BRICK TO BE REPLACED; # INDICATES UNITS
- DM # DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET
- MJ # DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET
- STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET

- EF # EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET
- VG # VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
- AG # ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
- RS # RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET
- AS # ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET
- ✕ EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED

CONCRETE

- CC # CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET
- DC # DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET
- SC # SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET
D = DEEP SPALL, REFER TO DETAIL 2/S501

- BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET

SEALANTS

- PS # FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
- FS # FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET

PAINT

- △ CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED

SHEET NOTES

- ◆ DEFECT NOTE; REFER TO REPAIR NOTES

NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET

REPAIR NOTES

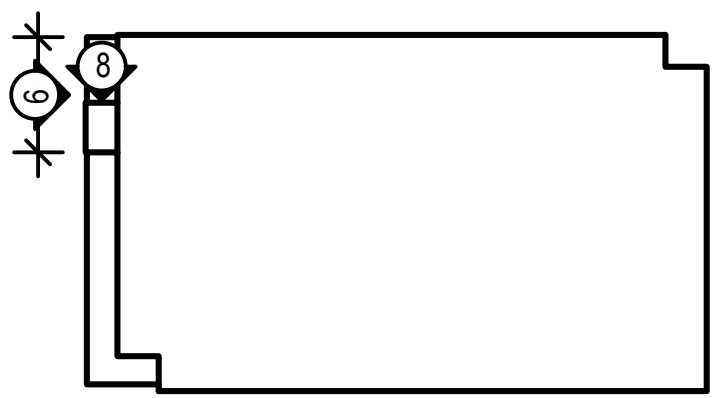
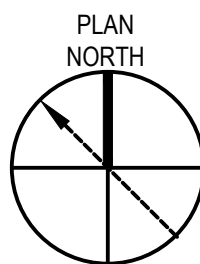
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NOTE: REMOVE, TAG, STORE, AND REINSTALL EXISTING CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL AT THE JOSEPH M. DOWNES GARAGE. REPLACE DETERIORATED CAPSTONES TO MATCH EXISTING. REFER TO DETAIL 3/A701.

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KEY PLAN

NOT TO SCALE



◆ ELEVATION SHOWN ON THIS PLAN



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FACILITIES IN LOWELL, MA

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NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	ERS		
CHECKED BY	AE0/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

GRAPHIC SCALE

SHEET TITLE

JOSEPH M.
DOWNES GARAGE
ELEVATIONS

DRAWING NO.

A205



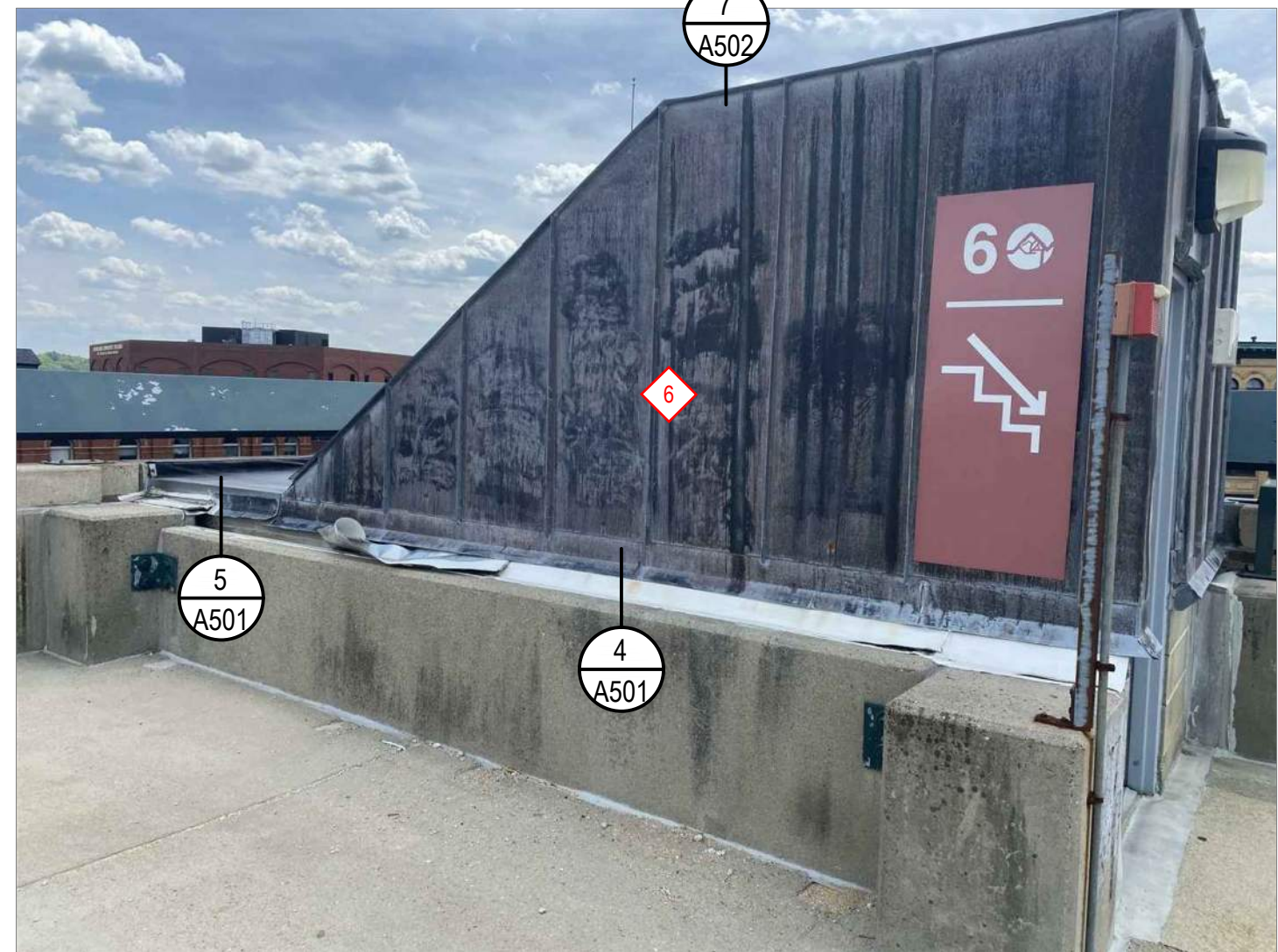
11
A206
JOSEPH M. DOWNES
PENTHOUSE EAST ELEVATION
SCALE: NOT TO SCALE



12
A206
JOSEPH M. DOWNES
PENTHOUSE PARTIAL SOUTH ELEVATION
SCALE: NOT TO SCALE

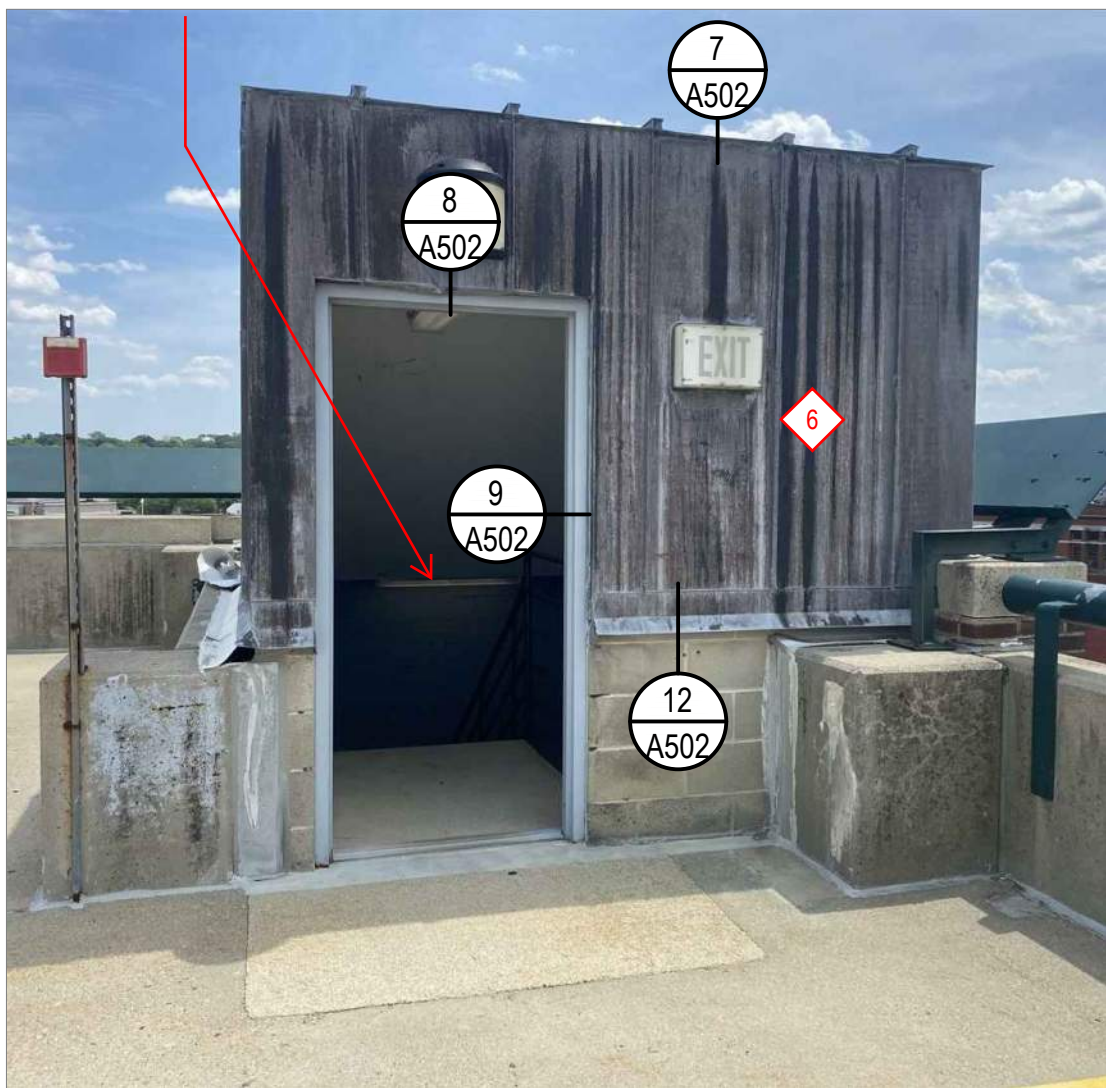


13
A206
JOSEPH M. DOWNES
PENTHOUSE PARTIAL NORTH ELEVATION
SCALE: NOT TO SCALE

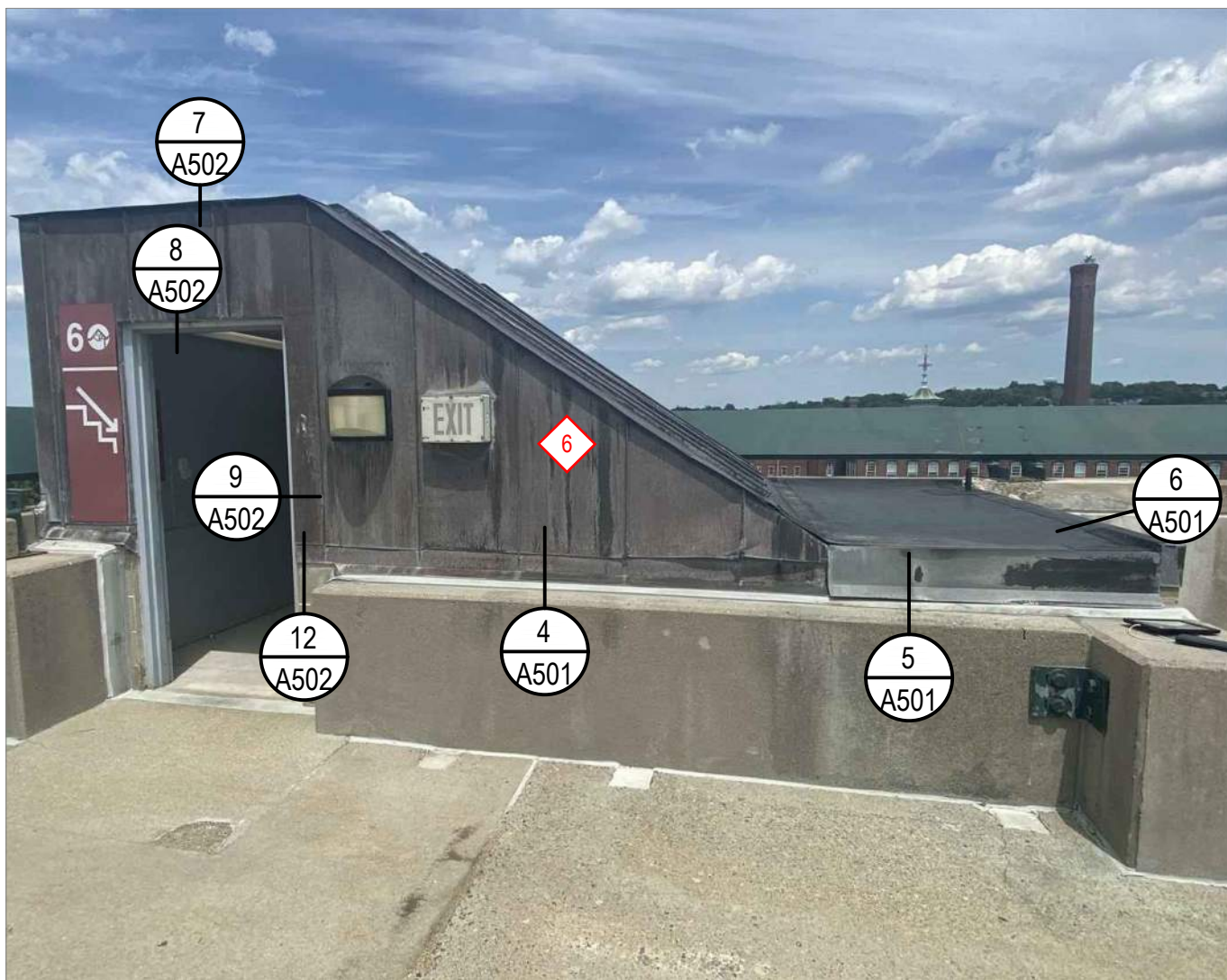


14
A206
JOSEPH M. DOWNES
PENTHOUSE EAST ELEVATION
SCALE: NOT TO SCALE

CONTRACTOR TO REMOVE AND REPLACE
DETERIORATED INTERIOR FINISHES AT THE
UNDERSIDE OF PENTHOUSE ROOF



15
A206
JOSEPH M. DOWNES
PENTHOUSE PARTIAL SOUTH ELEVATION
SCALE: NOT TO SCALE



16
A206
JOSEPH M. DOWNES
PENTHOUSE PARTIAL NORTH ELEVATION
SCALE: NOT TO SCALE

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.

ELEVATION NOTES

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REPAIR LEGEND

MASONRY

- | | | | |
|---------|--|---------|--|
| CB
| CRACKED BRICK TO BE REPLACED;
INDICATES UNITS | EF
| EFFLORESCENCE TO BE CLEANED;
INDICATES SQUARE FEET |
| SB
| SPALLED BRICK TO BE REPLACED;
INDICATES UNITS | VG
| VEGETATIVE GROWTH TO BE CLEANED;
INDICATES SQUARE FEET |
| DM
| DETERIORATED MORTAR JOINT TO BE
REPOINTED, REFER TO DETAIL 1/A701;
INDICATES SQUARE FEET | AG
| ALGAE GROWTH TO BE CLEANED;
INDICATES SQUARE FEET |
| MJ
| DETERIORATED MORTAR JOINT TO BE
REPOINTED, REFER TO DETAIL 1/A701;
INDICATES LINEAR FEET | RS
| RUST STAINING TO BE CLEANED;
INDICATES SQUARE FEET |
| | STEP CRACK TO BE REPAIRED
(APPROXIMATE SCALE);
INDICATES LINEAR FEET | AS
| ATMOSPHERIC STAINING TO BE
CLEANED; # INDICATES SQUARE FEET |
| | | ✕ | EXISTING ANCHOR/METAL STUB TO BE
REMOVED AND VOID IN BRICK OR
MORTAR TO BE PATCHED |

CONCRETE

- | | |
|---------|---|
| CC
| CRACKED CONCRETE, REFER TO
DETAIL 4/S501;
INDICATES LINEAR FEET |
| DC
| DELAMINATING CONCRETE, REFER TO
DETAIL 1/S501;
INDICATES SQUARE FEET |
| SC
| SPALLED CONCRETE, REFER TO DETAIL
1/S501; # INDICATES SQUARE FEET
D = DEEP SPALL, REFER TO DETAIL
2/S501 |

PAINT

- | | |
|---|--|
| △ | CLASS 3 PAINT DEFECT(PEELING PAINT);
SUBSTRATE TO BE SCRAPPED, PRIMED,
AND PAINTED |
|---|--|

SEALANTS

- | | |
|---------|--|
| PS
| FAILED PERIMETER SEALANT TO BE
REPAIRED, REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET |
| FS
| FAILED SEALANT TO BE REPAIRED,
REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET |

SHEET NOTES

- | | |
|---|---------------------------------------|
| ◆ | DEFECT NOTE;
REFER TO REPAIR NOTES |
|---|---------------------------------------|

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REPAIR NOTES

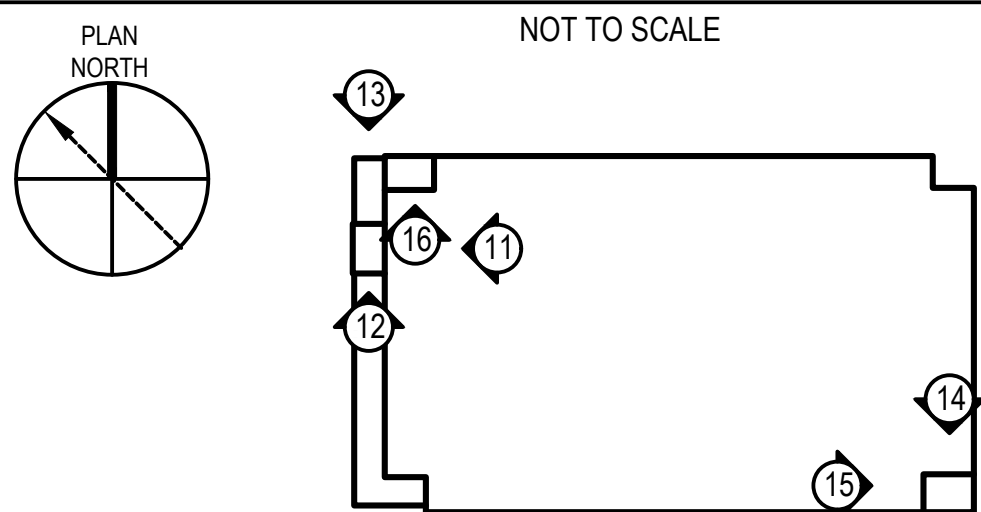
1. REMOVE AND REPLACE EXISTING STOREFRONT; REFER TO A800s
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NOTE: REMOVE, TAG, STORE, AND REINSTALL EXISTING CONCRETE PARAPET CAPS WITH EPOXY
COATED DOWELS INTO EXISTING MASONRY WALL AT THE JOSEPH M. DOWNES GARAGE. REPLACE
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KEY PLAN

NOT TO SCALE



◆ ELEVATION SHOWN ON THIS PLAN



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FACILITIES IN LOWELL, MA

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NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	ERS		
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DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

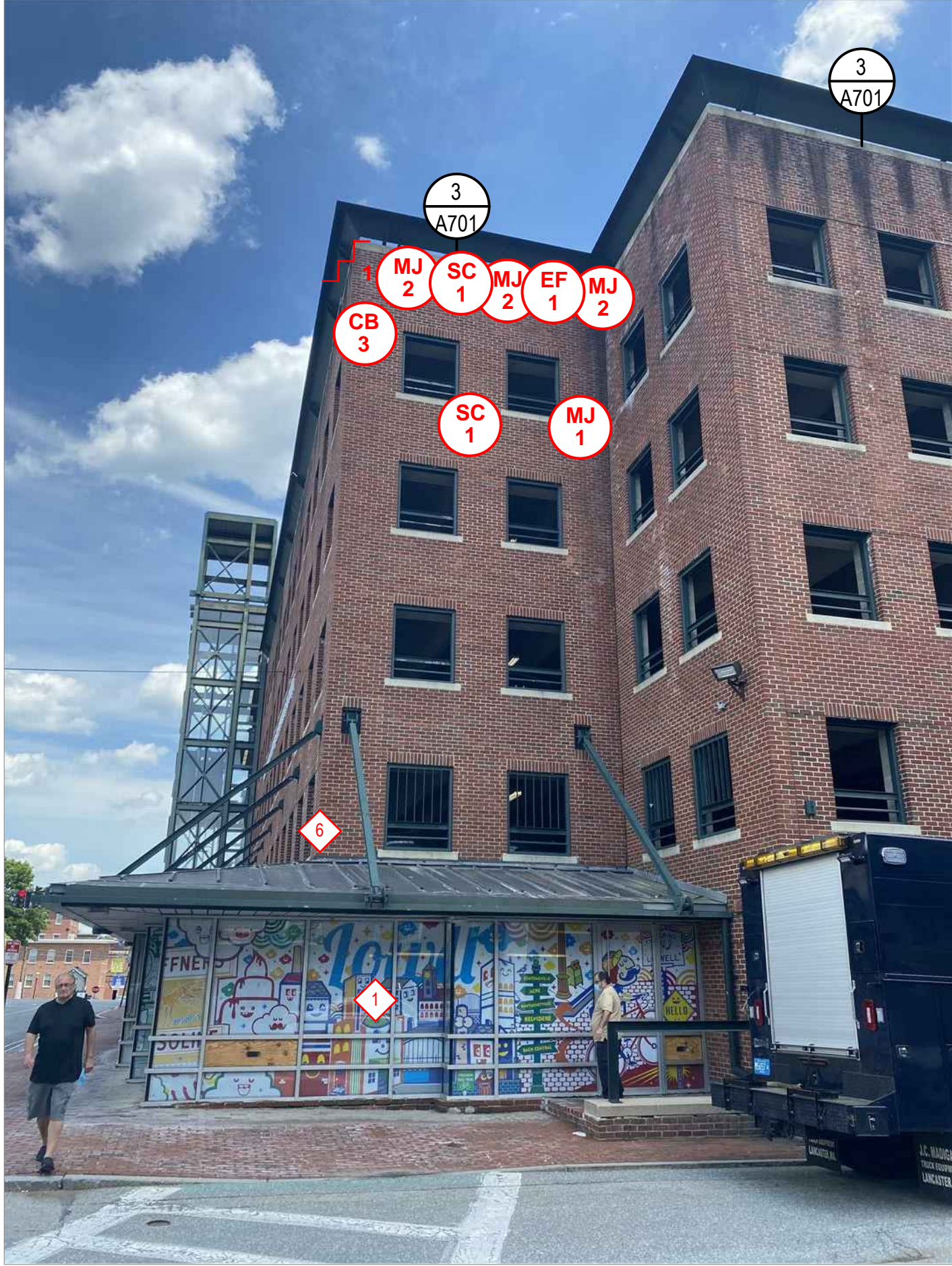
GRAPHIC SCALE

SHEET TITLE

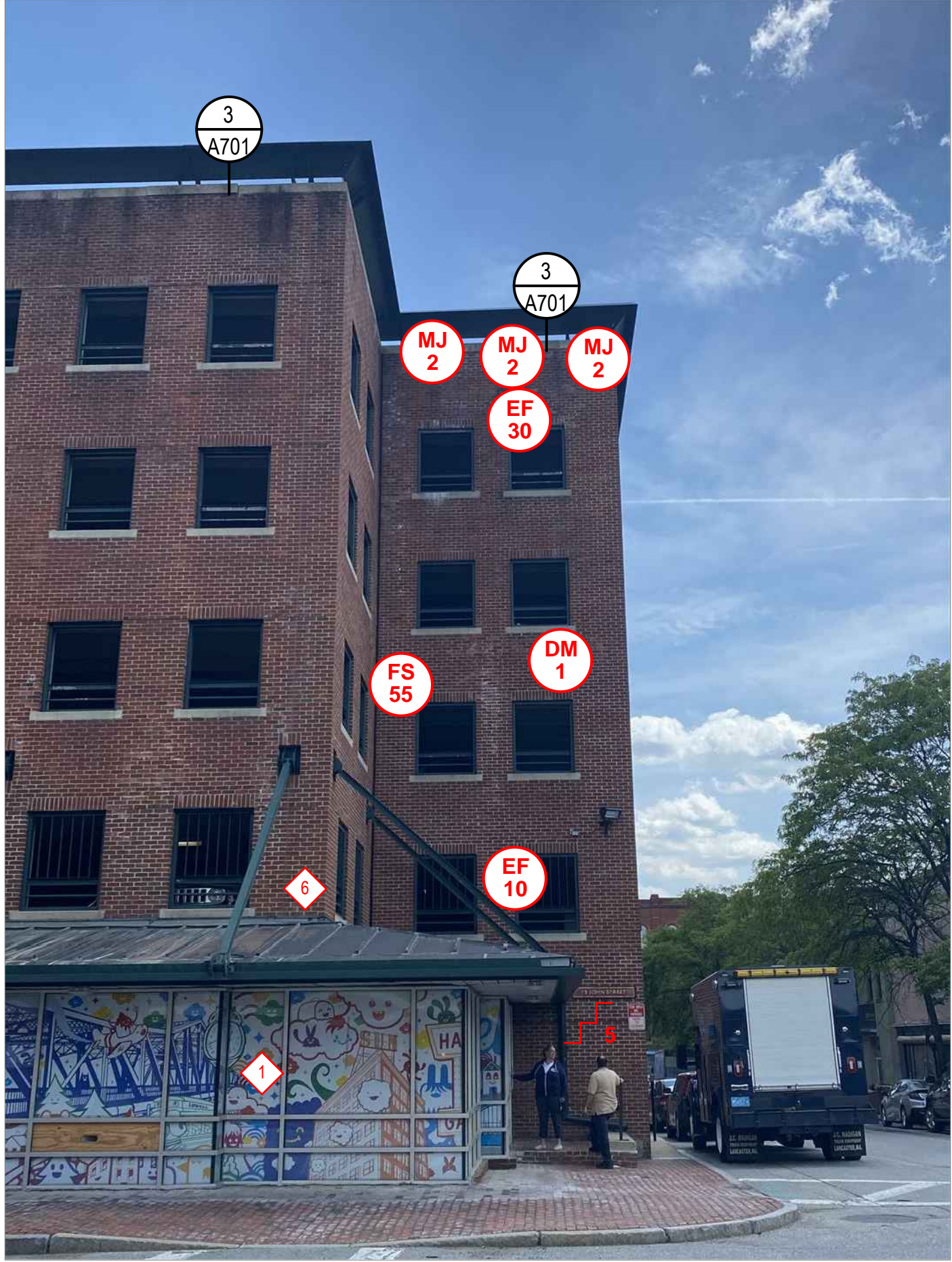
JOSEPH M.
DOWNES GARAGE
PENTHOUSE AND
HIDDEN ELEVATIONS

DRAWING NO.

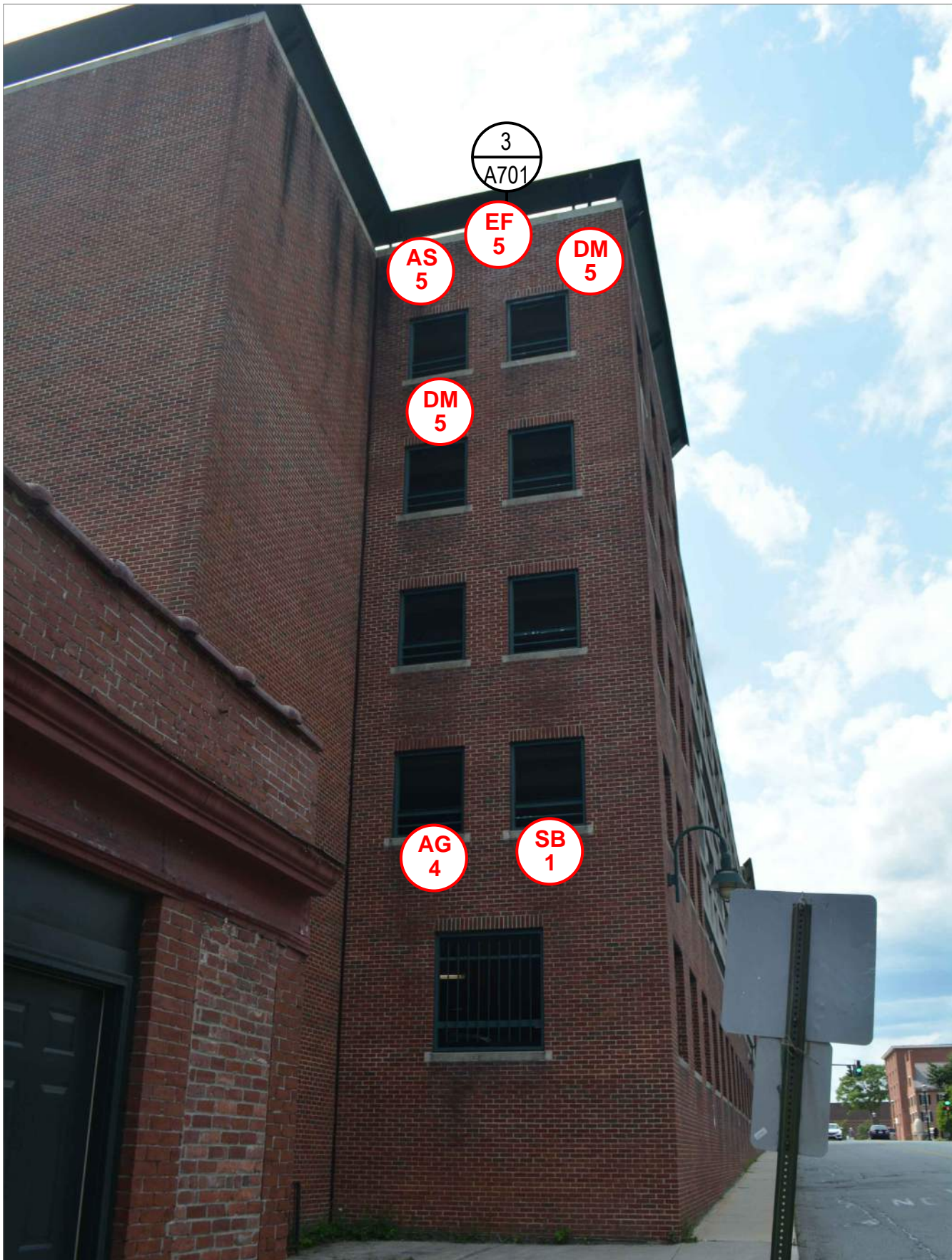
A206



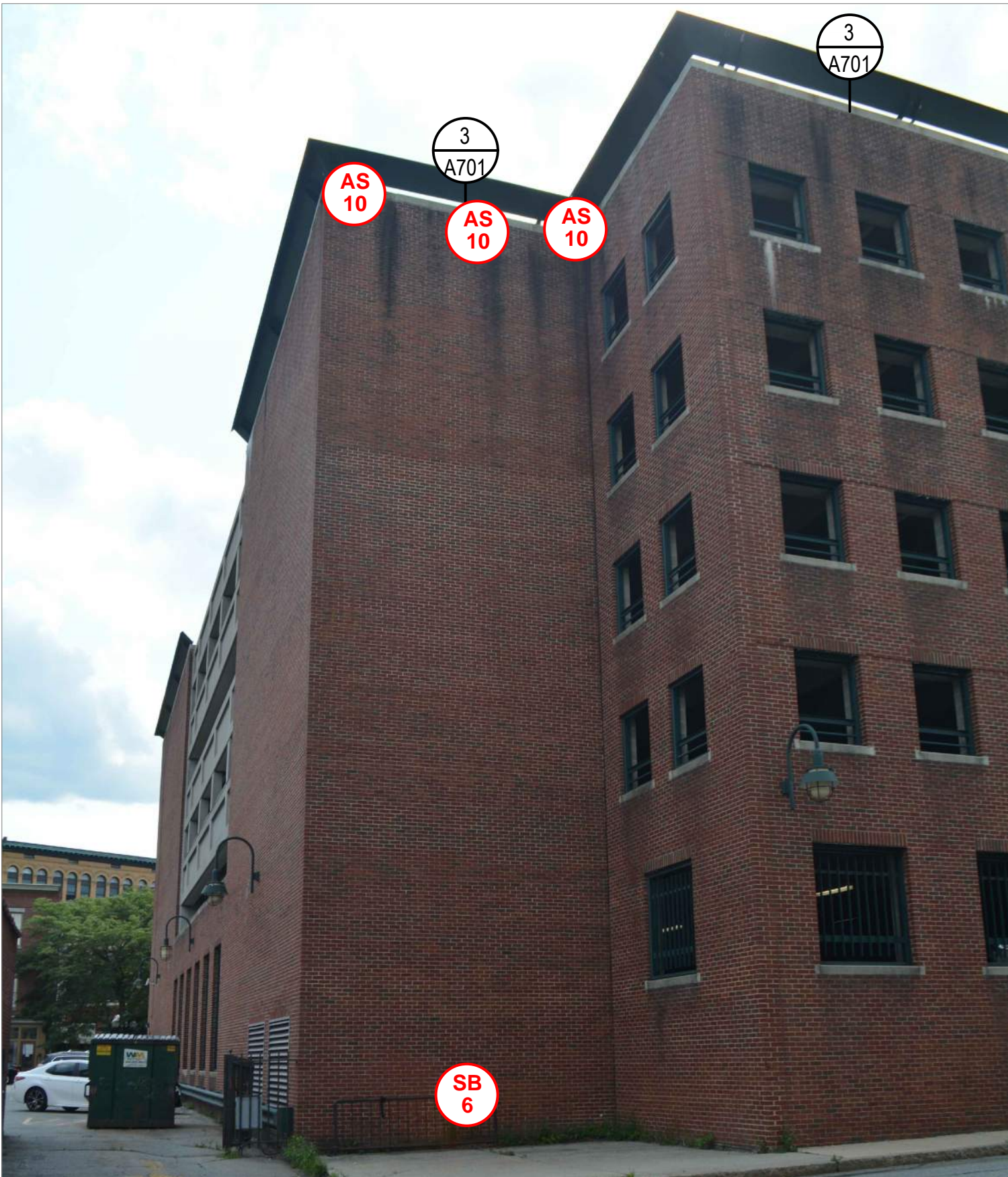
17
A207
JOSEPH M. DOWNES PARTIAL SOUTH ELEVATION
SCALE: NOT TO SCALE



18
A207
JOSEPH M. DOWNES PARTIAL WEST ELEVATION
SCALE: NOT TO SCALE



19
A207
JOSEPH M. DOWNES PARTIAL NORTH ELEVATION
SCALE: NOT TO SCALE



20
A207
JOSEPH M. DOWNES PARTIAL EAST ELEVATION
SCALE: NOT TO SCALE

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ELEVATION NOTES

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REPAIR LEGEND

MASONRY

- | | | | |
|---------|--|---------|--|
| CB
| CRACKED BRICK TO BE REPLACED;
INDICATES UNITS | EF
| EFFLORESCENCE TO BE CLEANED;
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| DETERIORATED MORTAR JOINT TO BE
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INDICATES SQUARE FEET | AG
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| RUST STAINING TO BE CLEANED;
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| | STEP CRACK TO BE REPAIRED
(APPROXIMATE SCALE);
INDICATES LINEAR FEET | AS
| ATMOSPHERIC STAINING TO BE
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| | | ✕ | EXISTING ANCHOR/METAL STUB TO BE
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MORTAR TO BE PATCHED |

CONCRETE

- | | |
|---------|---|
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DETAIL 1/S501;
INDICATES SQUARE FEET |
| SC
| SPALLED CONCRETE, REFER TO DETAIL
1/S501; # INDICATES SQUARE FEET
D = DEEP SPALL, REFER TO DETAIL
2/S501 |

SEALANTS

- | | |
|---------|--|
| PS
| FAILED PERIMETER SEALANT TO BE
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INDICATES LINEAR FEET |

PAINT

- | | |
|---|---|
| △ | CLASS 3 PAINT DEFECT(PEELING PAINT);
SUBSTRATE TO BE SCRAPED, PRIMED,
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|---|---|

SHEET NOTES

- | | |
|---|---------------------------------------|
| ◆ | DEFECT NOTE;
REFER TO REPAIR NOTES |
|---|---------------------------------------|

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REPAIR NOTES

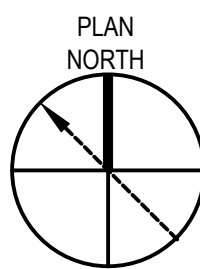
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KEY PLAN

NOT TO SCALE



◆ ELEVATION SHOWN ON THIS PLAN



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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	ERS		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

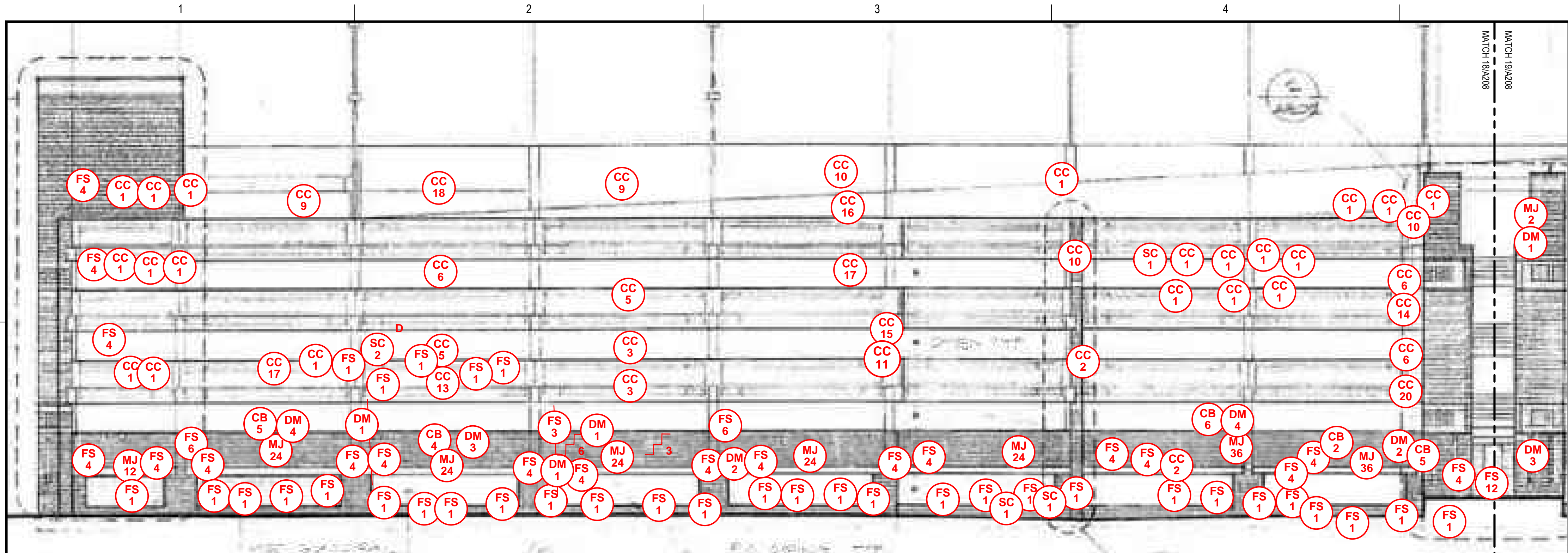
GRAPHIC SCALE

SHEET TITLE





JOSEPH M.
DOWNES GARAGE
ELEVATIONS

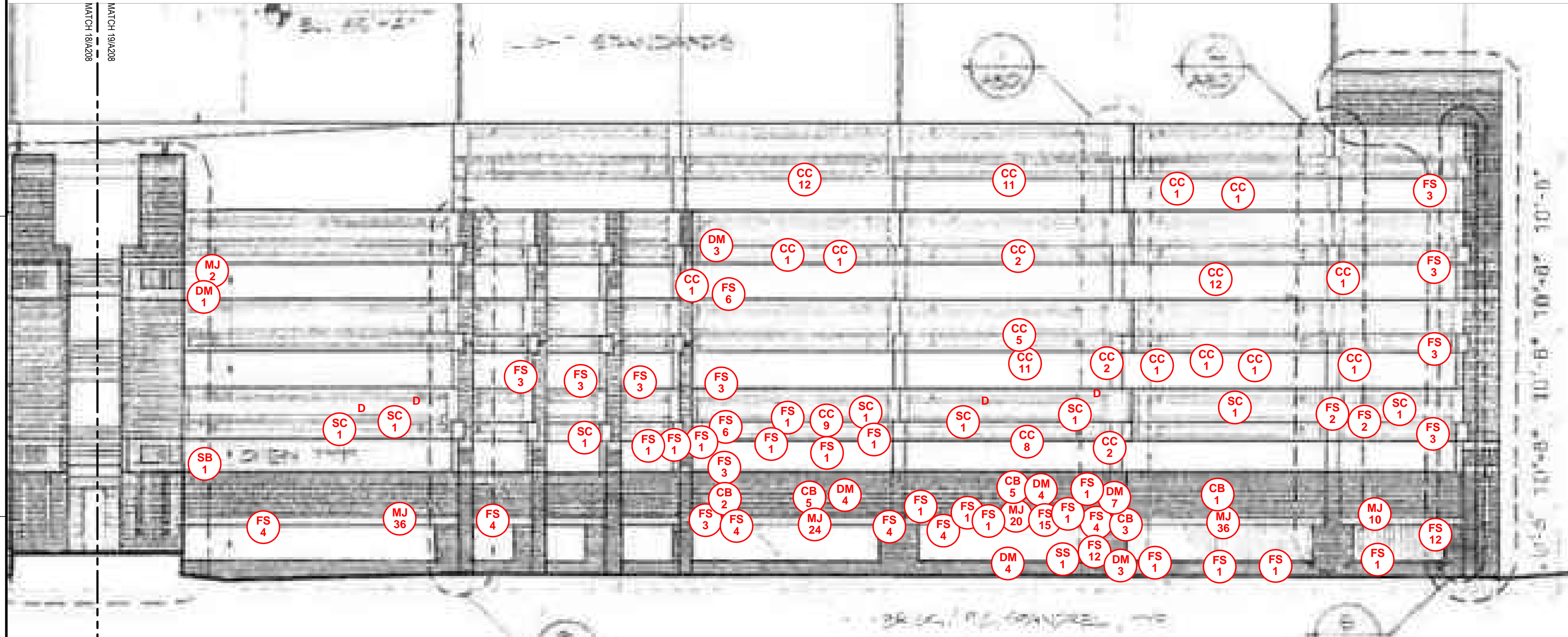
DRAWING NO.

A207



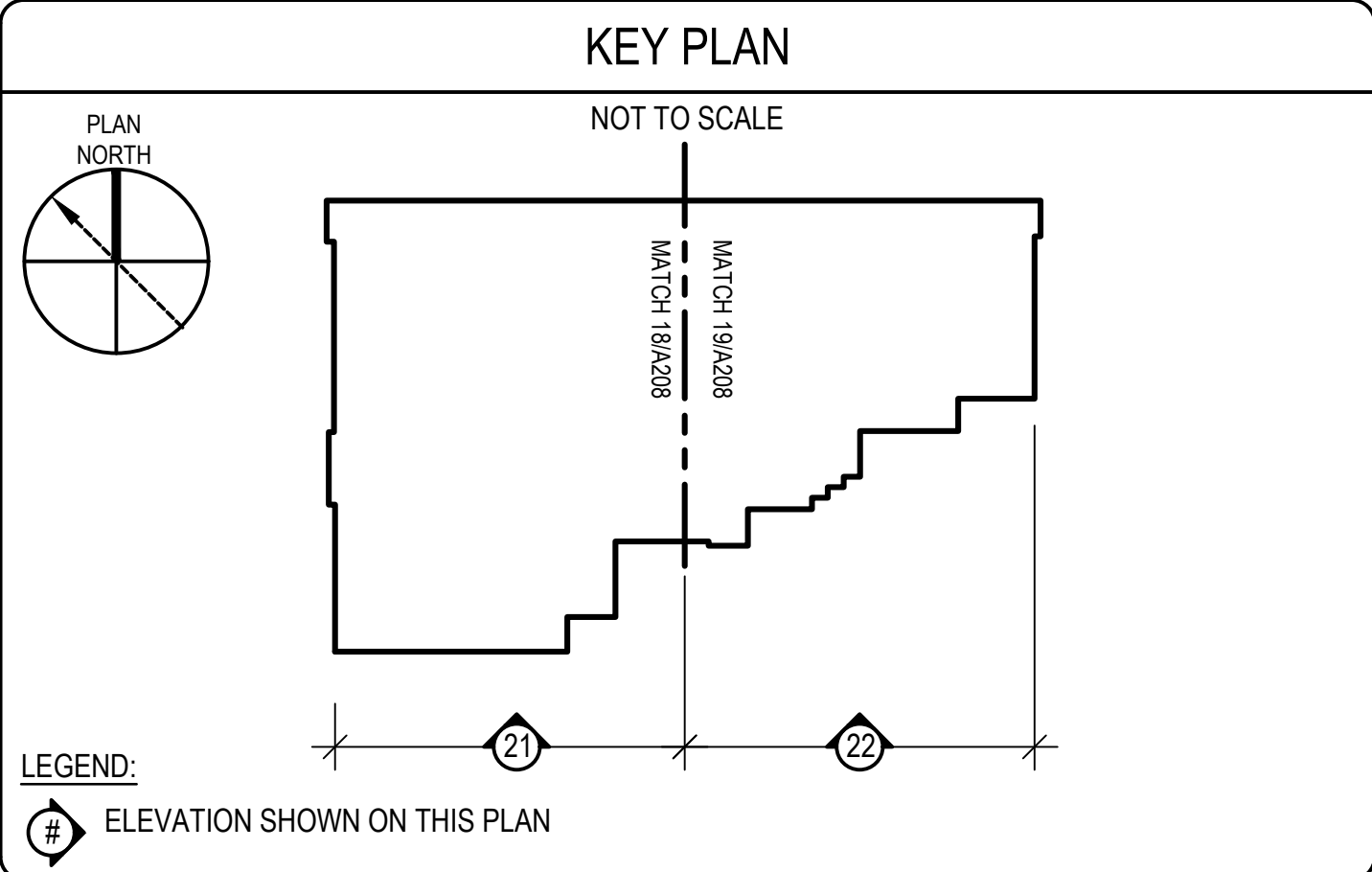
- ### ELEVATION NOTES
1. THE INFORMATION SHOWN ON THIS DRAWING HAS BEEN COMPILED FROM VARIOUS SOURCES, AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION.
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REPAIR LEGEND			
MASONRY			
<div>CB #</div> <div>CRACKED BRICK TO BE REPLACED; # INDICATES UNITS</div>	<div>EF #</div> <div>EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET</div>		
<div>SB #</div> <div>SPALLED BRICK TO BE REPLACED; # INDICATES UNITS</div>	<div>VG #</div> <div>VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET</div>		
<div>DM #</div> <div>DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET</div>	<div>AG #</div> <div>ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET</div>		
<div>MJ #</div> <div>DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET</div>	<div>RS #</div> <div>RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET</div>		
<div>STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET</div>	<div>AS #</div> <div>ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET</div>		
	<div>✕</div> <div>EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED</div>		
CONCRETE			
<div>CC #</div> <div>CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET</div>	<div>BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET</div>		
<div>DC #</div> <div>DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET</div>	SEALANTS		
<div>SC #</div> <div>SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET D = DEEP SPALL, REFER TO DETAIL 2/S501</div>	<div>PS #</div> <div>FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET</div>		
	<div>FS #</div> <div>FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET</div>		
PAINT		SHEET NOTES	
<div>CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED</div>	<div>DEFECT NOTE: REFER TO REPAIR NOTES</div>		
NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET			



NOTE: REMOVE AND REPLACE EXISTING CONCRETE PARAPET CAPS TO MATCH EXISTING AT THE GEORGE A. AYOTTE GARAGE. INSTALL NEW CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL. REFER TO DETAIL 2/A701.

NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.



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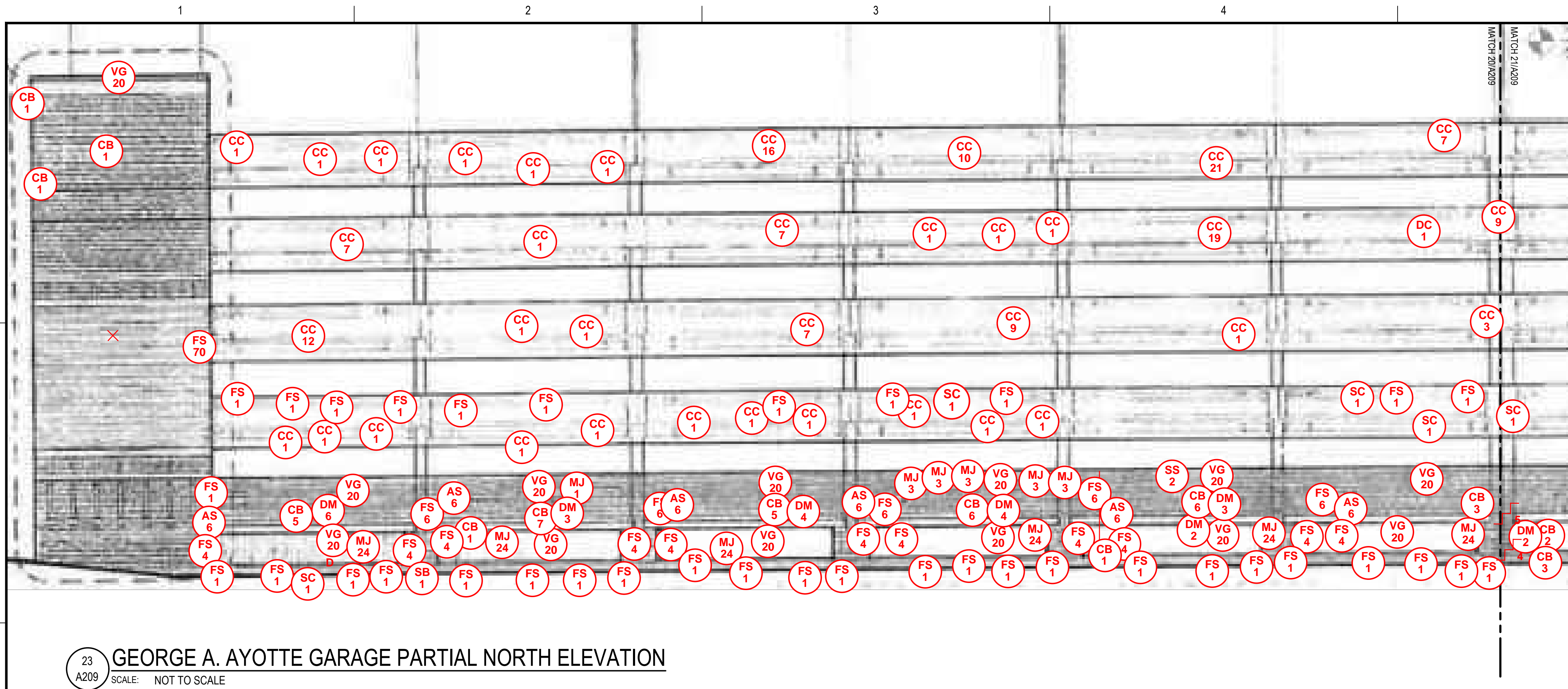
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GRAPHIC SCALE

SHEET TITLE

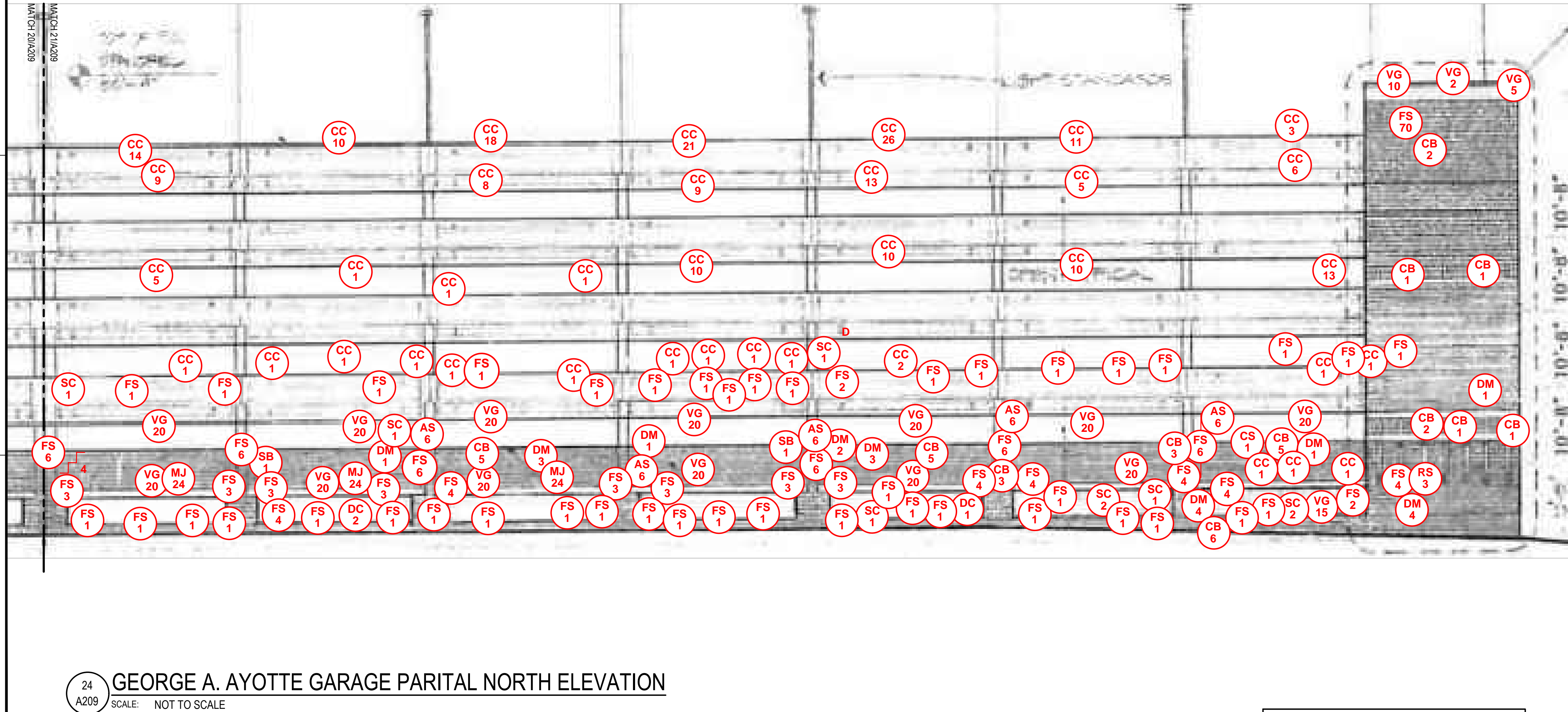
GEORGE A AYOTTE GARAGE ELEVATIONS

DRAWING NO.	
A208	



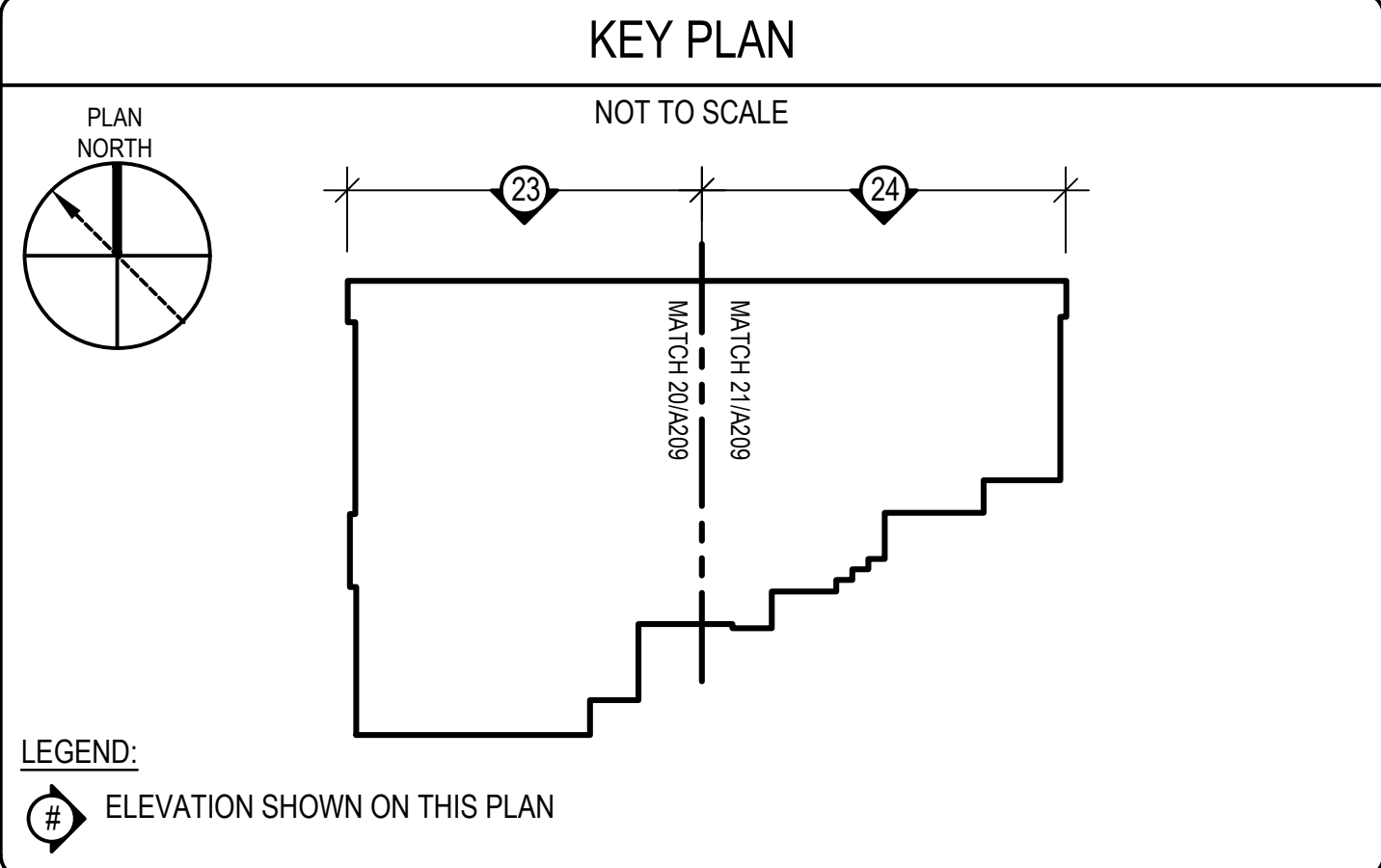
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REPAIR LEGEND	
MASONRY	
CB #	CRACKED BRICK TO BE REPLACED; # INDICATES UNITS
SB #	SPALLED BRICK TO BE REPLACED; # INDICATES UNITS
DM #	DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET
MJ #	DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET
SC	STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET
EF #	EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET
VG #	VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
AG #	ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
RS #	RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET
AS #	ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET
✕	EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED
⊠	BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET
CONCRETE	
CC #	CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET
DC #	DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET
SC #	SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET D = DEEP SPALL, REFER TO DETAIL 2/S501
SEALANTS	
PS #	FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
FS #	FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
PAINT	
⚠	CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED
SHEET NOTES	
⬠	DEFECT NOTE; REFER TO REPAIR NOTES
NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET	



NOTE: REMOVE AND REPLACE EXISTING CONCRETE PARAPET CAPS TO MATCH EXISTING AT THE GEORGE A. AYOTTE GARAGE. INSTALL NEW CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL. REFER TO DETAIL 2/A701.

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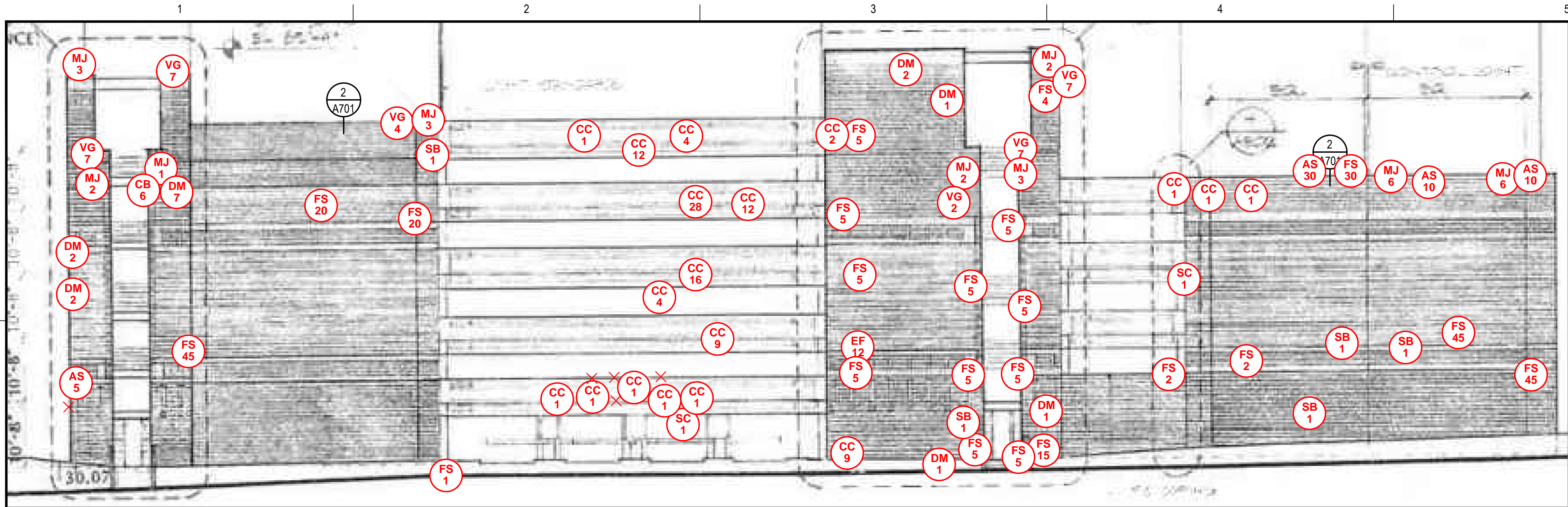


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PROJECT		OWNER	
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA		CITY OF LOWELL CITY HALL, 375 MERRIMACK ST., 3RD FLOOR LOWELL, MA 01852	
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DRAWN BY	NCB		
CHECKED BY	AE0/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		
GRAPHIC SCALE			
SHEET TITLE			
GEORGE A AYOTTE GARAGE ELEVATIONS			
DRAWING NO.		A209	

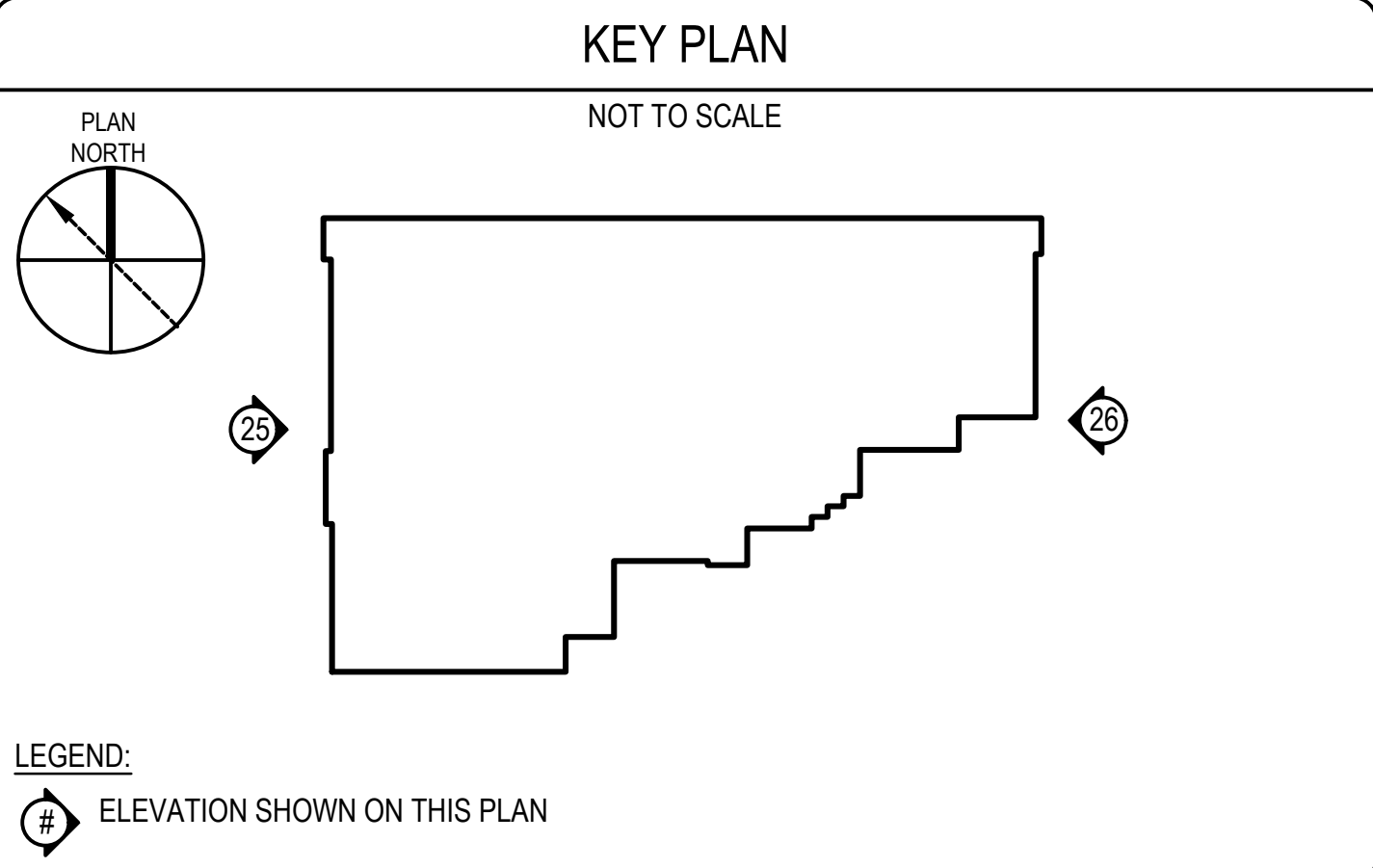
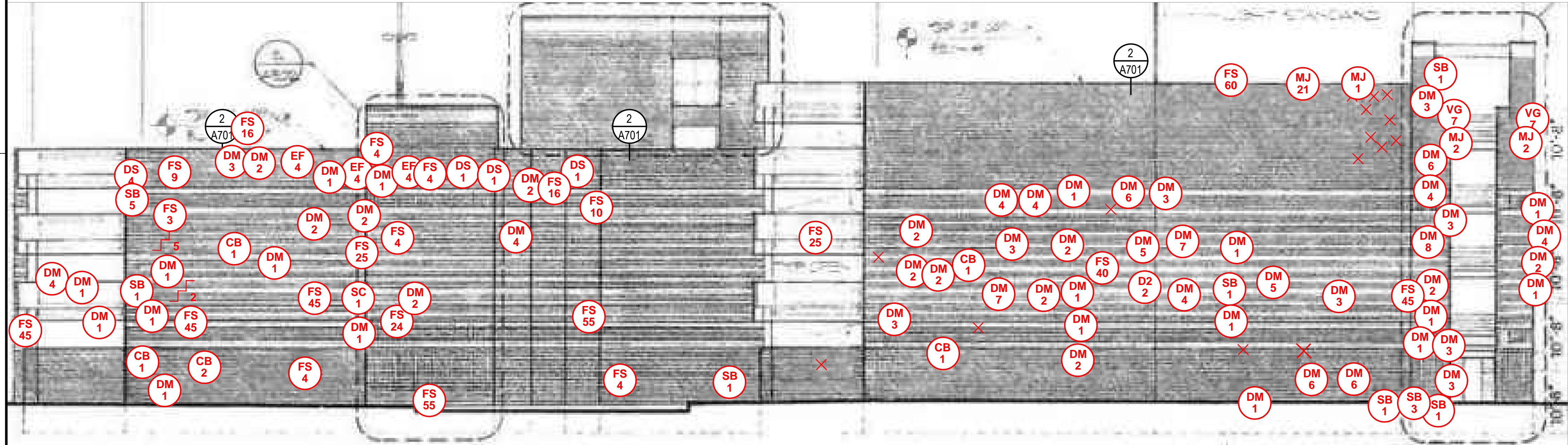


- ELEVATION NOTES**
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REPAIR LEGEND		
MASONRY		
<div>CB #</div> <div>CRACKED BRICK TO BE REPLACED; # INDICATES UNITS</div>	<div>EF #</div> <div>EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET</div>	
<div>SB #</div> <div>SPALLED BRICK TO BE REPLACED; # INDICATES UNITS</div>	<div>VG #</div> <div>VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET</div>	
<div>DM #</div> <div>DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET</div>	<div>AG #</div> <div>ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET</div>	
<div>MJ #</div> <div>DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET</div>	<div>RS #</div> <div>RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET</div>	
<div>STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET</div>	<div>AS #</div> <div>ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET</div>	
	<div>×</div> <div>EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED</div>	
CONCRETE		
<div>CC #</div> <div>CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET</div>	<div>BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET</div>	
<div>DC #</div> <div>DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET</div>	SEALANTS	
<div>SC #</div> <div>SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET D = DEEP SPALL, REFER TO DETAIL 2/S501</div>	<div>PS #</div> <div>FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET</div>	
	<div>FS #</div> <div>FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET</div>	
PAINT		
<div>CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED</div>	SHEET NOTES	
	<div>DEFECT NOTE; REFER TO REPAIR NOTES</div>	
NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET		

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25
A210
GEORGE A. AYOTTE GARAGE WEST ELEVATION
SCALE: NOT TO SCALE

26
A210
GEORGE A. AYOTTE GARAGE EAST ELEVATION
SCALE: NOT TO SCALE

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.



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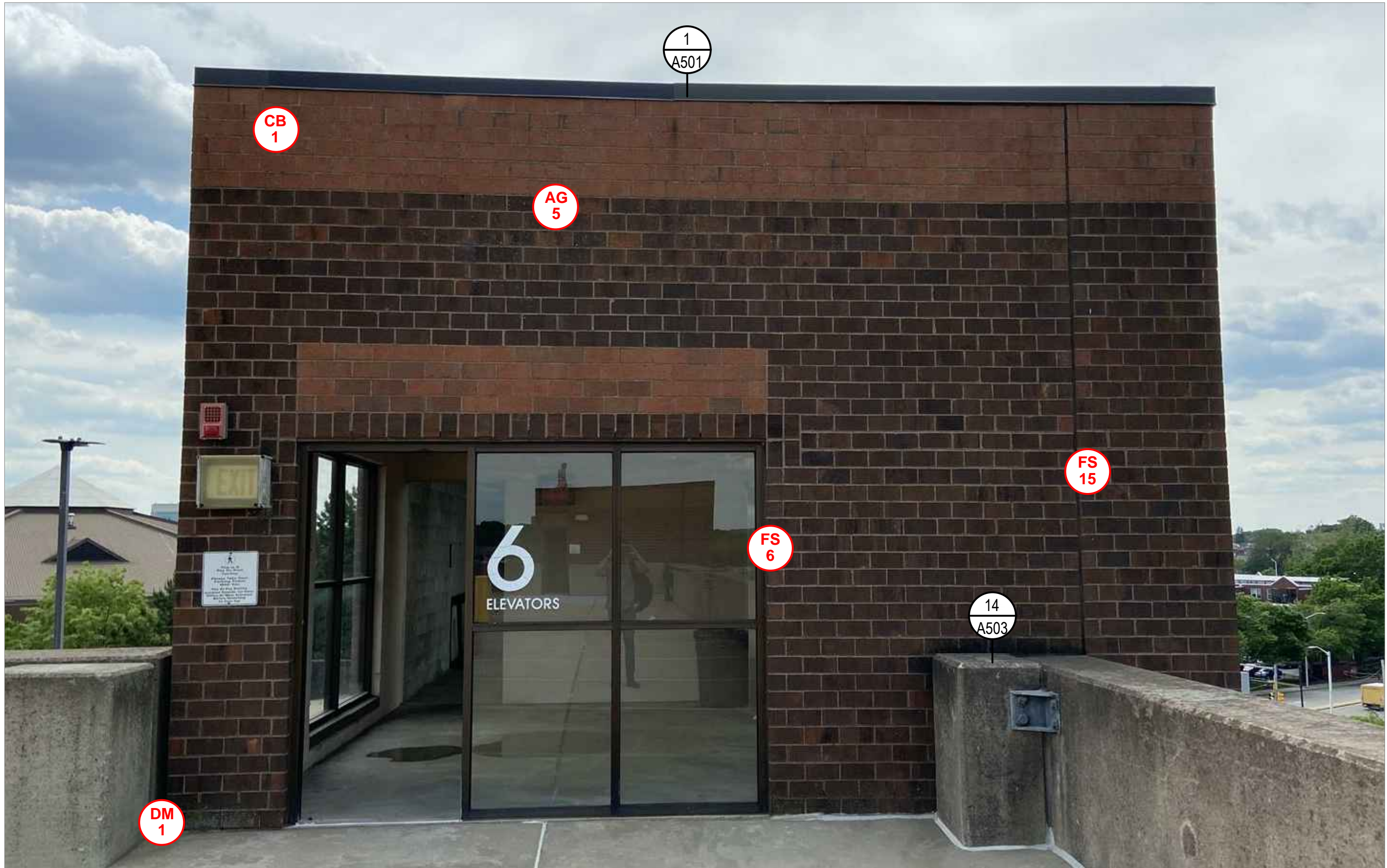
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	CITY OF LOWELL CITY HALL, 375 MERRIMACK ST., 3RD FLOOR LOWELL, MA 01852	
OWNER		

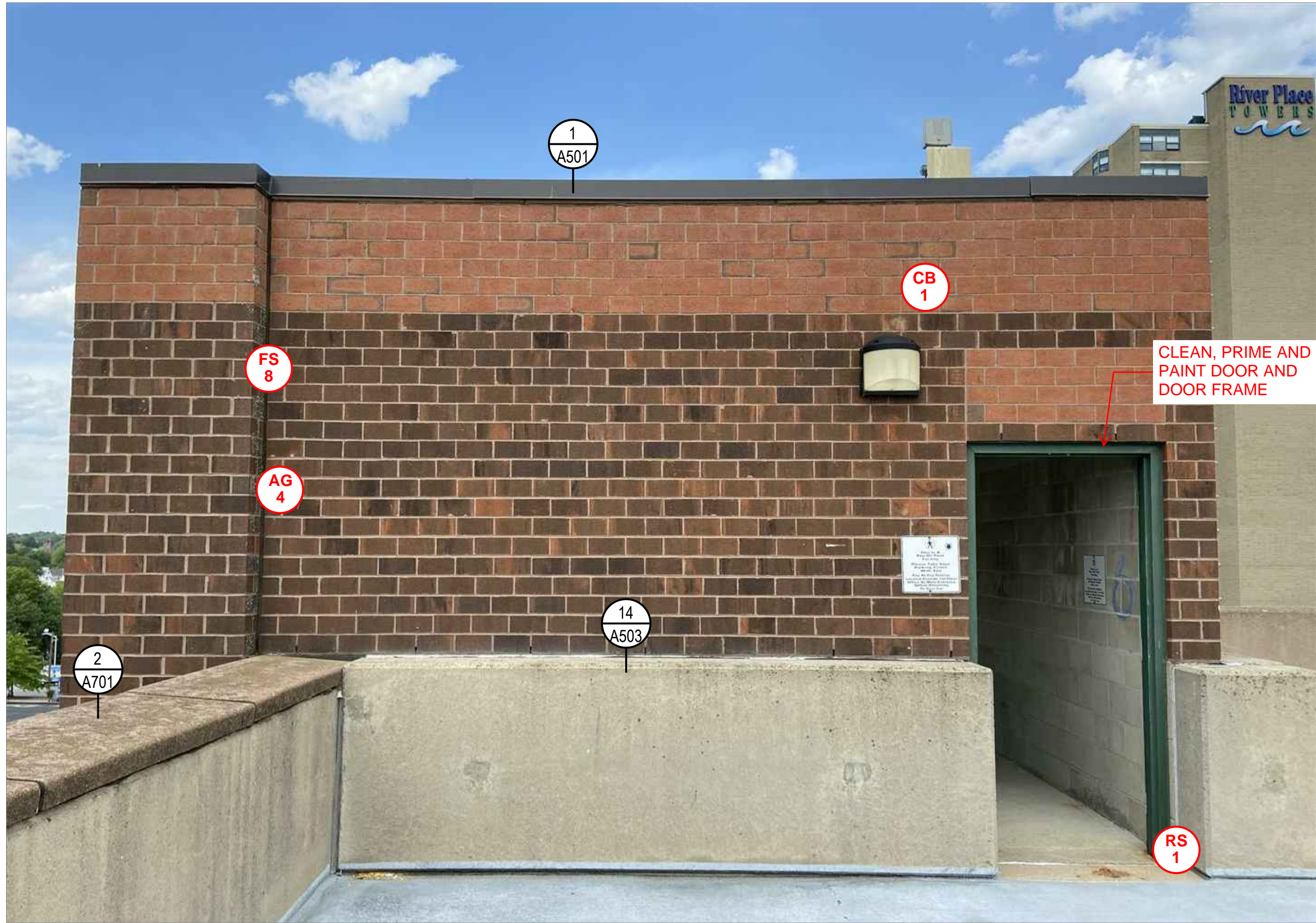
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DRAWING SCALE	NOT TO SCALE		

GRAPHIC SCALE	
SHEET TITLE	
GEORGE A AYOTTE GARAGE ELEVATIONS	
DRAWING NO.	A210



27
A211

GEORGE A. AYOTTE GARAGE PENTHOUSE NORTH ELEVATION
SCALE: NOT TO SCALE



28
A211

GEORGE A. AYOTTE GARAGE PENTHOUSE SOUTH ELEVATION
SCALE: NOT TO SCALE

ELEVATION NOTES

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REPAIR LEGEND

MASONRY

CB #	CRACKED BRICK TO BE REPLACED; # INDICATES UNITS	EF #	EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET
SB #	SPALLED BRICK TO BE REPLACED; # INDICATES UNITS	VG #	VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
DM #	DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET	AG #	ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
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CONCRETE

CC #	CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET
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SEALANTS

PS #	FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
FS #	FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET

PAINT

△	CLASS 3 PAINT DEFECT (PEELING PAINT); SUBSTRATE TO BE SCRAPPED, PRIMED, AND PAINTED
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SHEET NOTES

◇	DEFECT NOTE; REFER TO REPAIR NOTES
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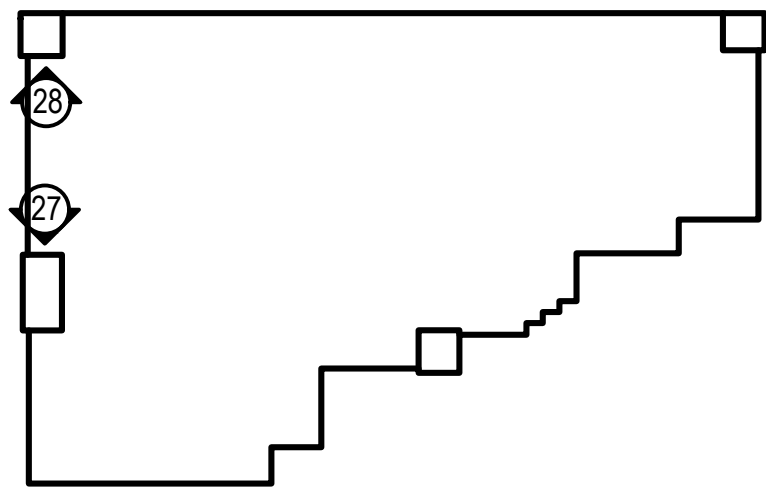
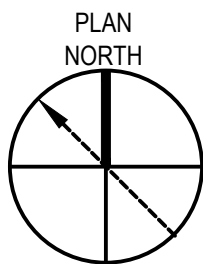
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KEY PLAN

NOT TO SCALE



LEGEND:

- ◇ ELEVATION SHOWN ON THIS PLAN

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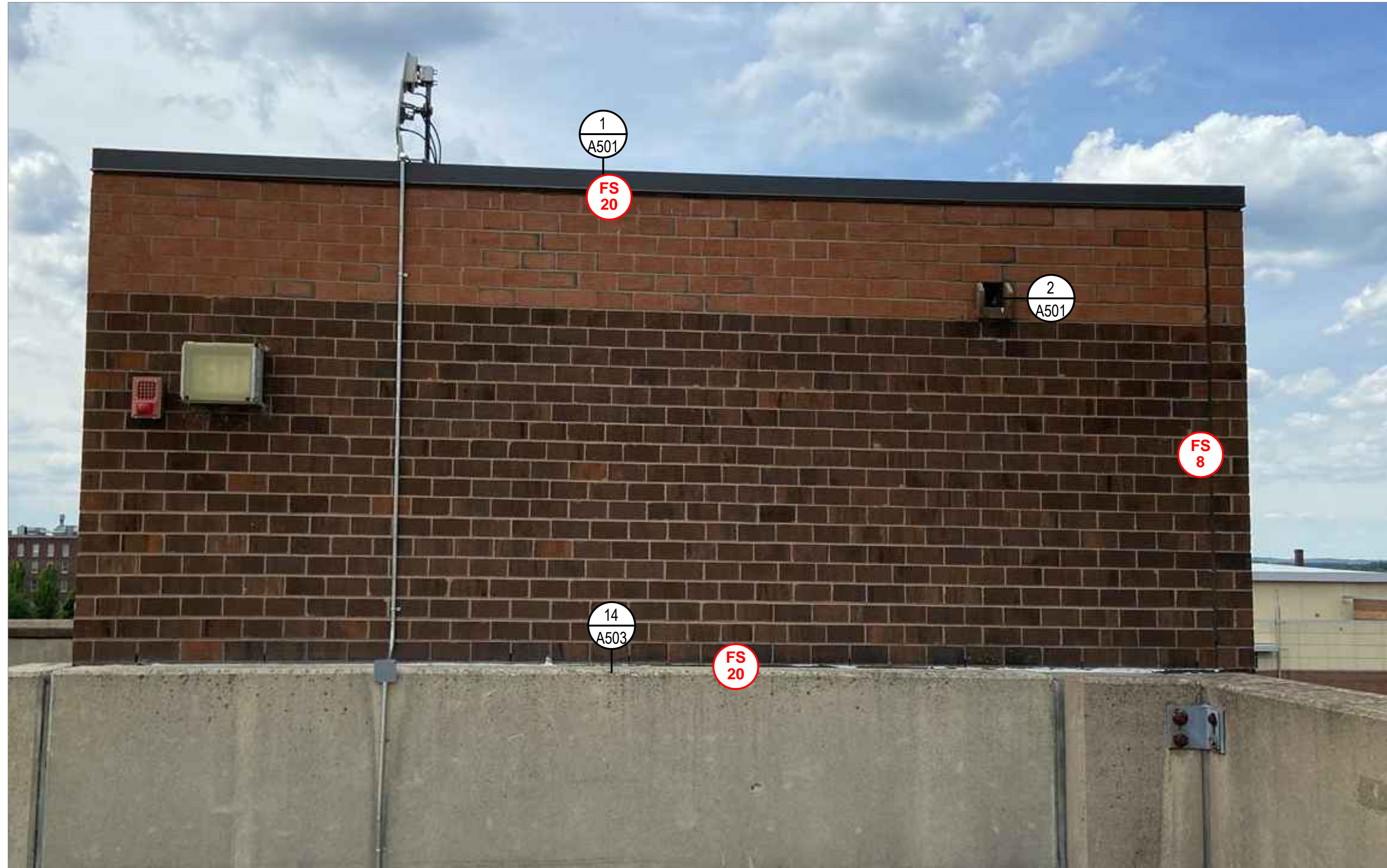
GRAPHIC SCALE

SHEET TITLE

GEORGE A AYOTTE
GARAGE PENTHOUSE
ELEVATIONS

DRAWING NO.

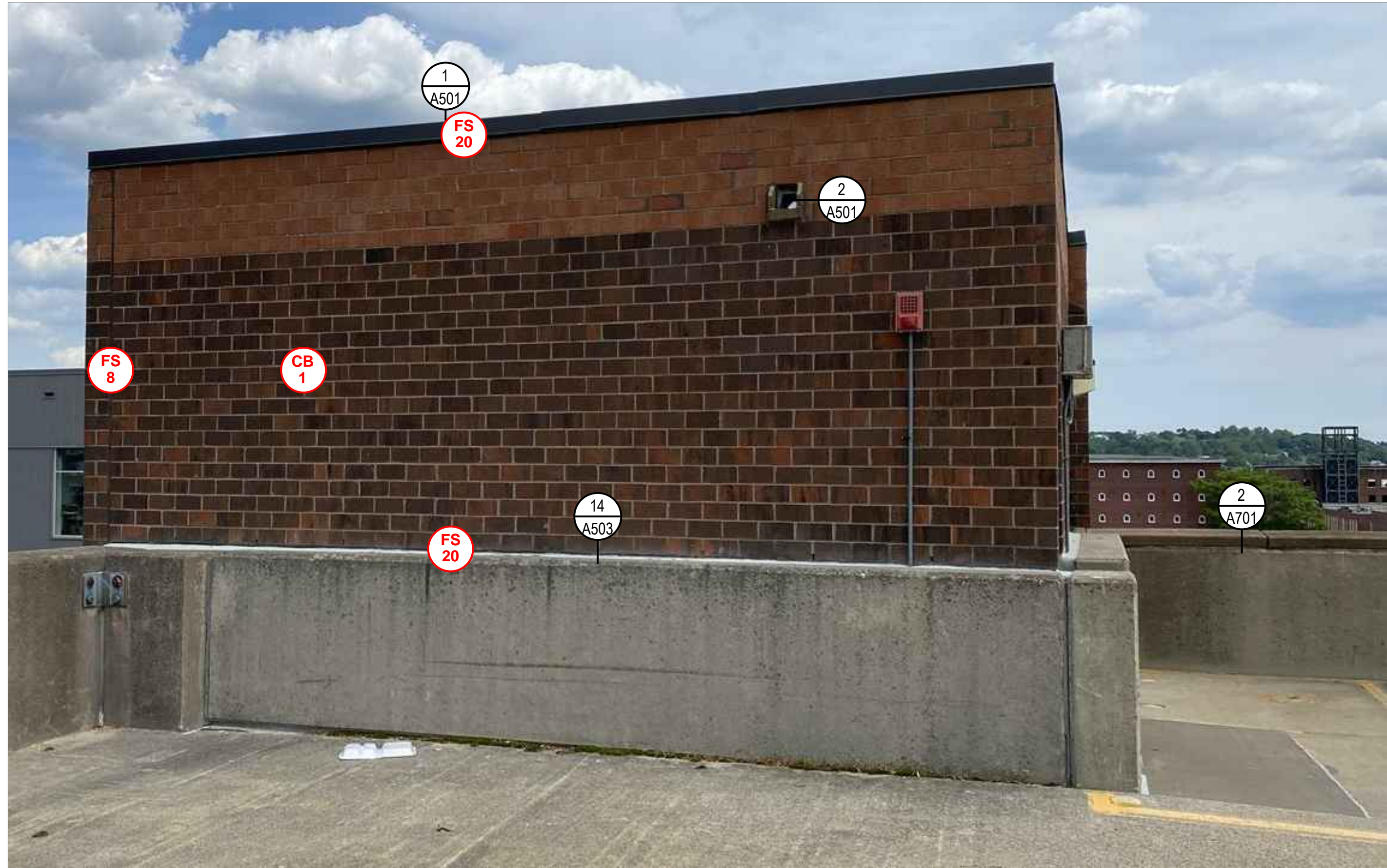
A211



29
A212

GEORGE A. AYOTTE GARAGE PENTHOUSE EAST ELEVATION

SCALE: NOT TO SCALE



30
A212

GEORGE A. AYOTTE GARAGE PENTHOUSE WEST ELEVATION

SCALE: NOT TO SCALE

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REPAIR LEGEND

MASONRY

- | | |
|---|--|
| <div>CB
#</div> <div>CRACKED BRICK TO BE REPLACED;
INDICATES UNITS</div> | <div>EF
#</div> <div>EFFLORESCENCE TO BE CLEANED;
INDICATES SQUARE FEET</div> |
| <div>SB
#</div> <div>SPALLED BRICK TO BE REPLACED;
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INDICATES LINEAR FEET</div> | <div>RS
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| <div>SC</div> <div>STEP CRACK TO BE REPAIRED
(APPROXIMATE SCALE);
INDICATES LINEAR FEET</div> | <div>AS
#</div> <div>ATMOSPHERIC STAINING TO BE
CLEANED; # INDICATES SQUARE FEET</div> |
| | <div>✕</div> <div>EXISTING ANCHOR/METAL STUB TO BE
REMOVED AND VOID IN BRICK OR
MORTAR TO BE PATCHED</div> |

CONCRETE

- | | |
|---|---|
| <div>CC
#</div> <div>CRACKED CONCRETE, REFER TO
DETAIL 4/S501;
INDICATES LINEAR FEET</div> | <div>PS
#</div> <div>FAILED PERIMETER SEALANT TO BE
REPAIRED, REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET</div> |
| <div>DC
#</div> <div>DELAMINATING CONCRETE, REFER TO
DETAIL 1/S501;
INDICATES SQUARE FEET</div> | <div>FS
#</div> <div>FAILED SEALANT TO BE REPAIRED,
REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET</div> |
| <div>SC
#</div> <div>SPALLED CONCRETE, REFER TO DETAIL
1/S501; # INDICATES SQUARE FEET
D = DEEP SPALL, REFER TO DETAIL
2/S501</div> | |

SEALANTS

PAINT

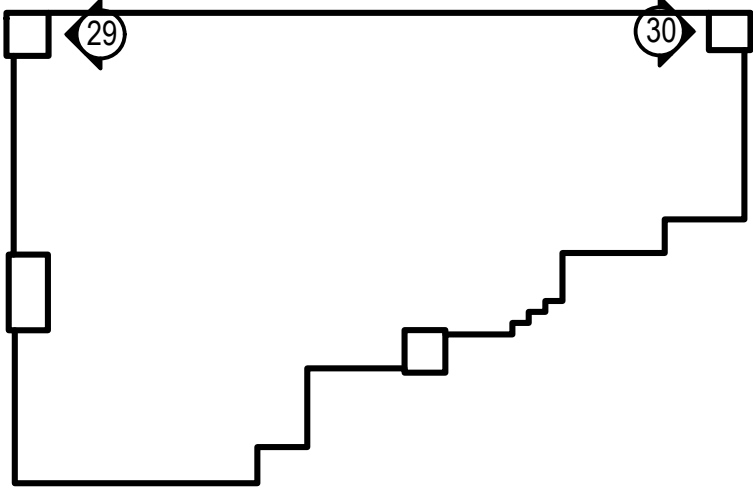
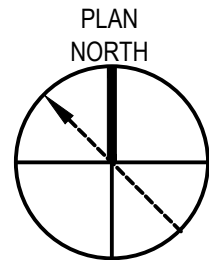
- | | |
|---|--|
| <div>△</div> <div>CLASS 3 PAINT DEFECT(PEELING PAINT);
SUBSTRATE TO BE SCRAPED, PRIMED,
AND PAINTED</div> | <div>◇</div> <div>DEFECT NOTE;
REFER TO REPAIR NOTES</div> |
|---|--|

SHEET NOTES

NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET

KEY PLAN

NOT TO SCALE



LEGEND:

- ◇ ELEVATION SHOWN ON THIS PLAN



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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	NCB		
CHECKED BY	AE0/ACP		
DATE	2/22/2022		
DRAWING SCALE	NOT TO SCALE		

GRAPHIC SCALE

SHEET TITLE

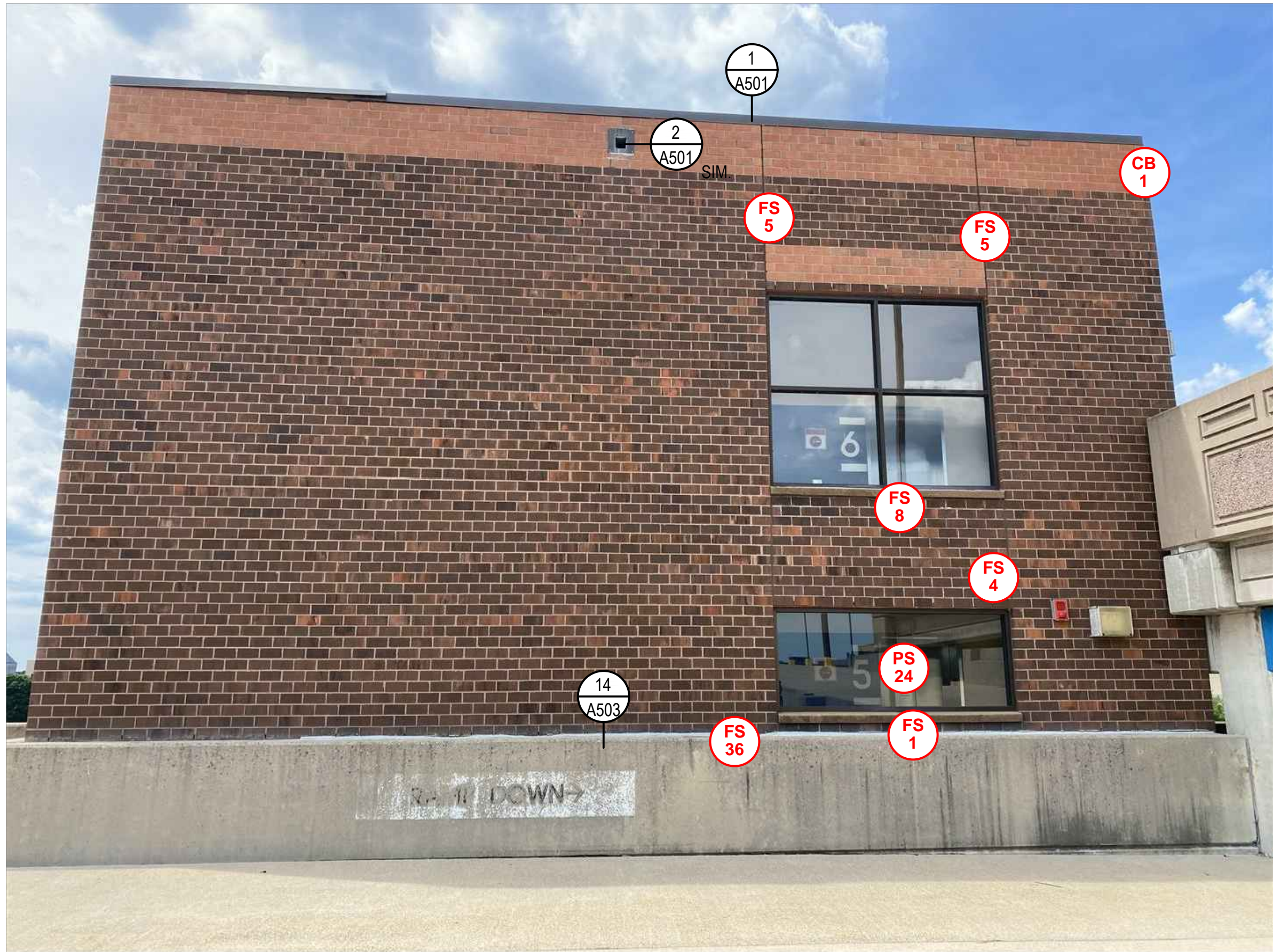
GEORGE A AYOTTE
GARAGE PENTHOUSE
ELEVATIONS

DRAWING NO.

A212



31
A213
GEORGE A. AYOTTE GARAGE PENTHOUSE SOUTH ELEVATION
SCALE: NOT TO SCALE



32
A213
GEORGE A. AYOTTE GARAGE PENTHOUSE EAST ELEVATION
SCALE: NOT TO SCALE

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.

ELEVATION NOTES

1. THE INFORMATION SHOWN ON THIS DRAWING HAS BEEN COMPILED FROM VARIOUS SOURCES, AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION.
2. DISCREPANCIES NOTED BY THE CONTRACTOR IN THE DRAWINGS OR SPECIFICATIONS MUST BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO BID SUBMISSION.
3. THE DEFECTS NOTED INDICATE APPROXIMATE LOCATIONS. THEY ARE NOT INTENDED TO DEFINE LIMITS OF WORK.
4. THE ELEVATION DRAWINGS SHOWN ON THIS SHEET ARE ORIGINAL SCANNED DOCUMENTS USED TO EXPEDITE THE DESIGN PROCESS. THE DRAWING MAY NOT BE FULL SCALE AS SHOWN. CONTRACTOR TO VERIFY DIMENSIONS IN FIELD.

REPAIR LEGEND

MASONRY

<div>CB #</div> CRACKED BRICK TO BE REPLACED; # INDICATES UNITS	<div>EF #</div> EFFLORESCENCE TO BE CLEANED; # INDICATES SQUARE FEET
<div>SB #</div> SPALLED BRICK TO BE REPLACED; # INDICATES UNITS	<div>VG #</div> VEGETATIVE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
<div>DM #</div> DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES SQUARE FEET	<div>AG #</div> ALGAE GROWTH TO BE CLEANED; # INDICATES SQUARE FEET
<div>MJ #</div> DETERIORATED MORTAR JOINT TO BE REPOINTED, REFER TO DETAIL 1/A701; # INDICATES LINEAR FEET	<div>RS #</div> RUST STAINING TO BE CLEANED; # INDICATES SQUARE FEET
<div>STEP CRACK TO BE REPAIRED (APPROXIMATE SCALE); # INDICATES LINEAR FEET</div>	<div>AS #</div> ATMOSPHERIC STAINING TO BE CLEANED; # INDICATES SQUARE FEET
	<div>✕</div> EXISTING ANCHOR/METAL STUB TO BE REMOVED AND VOID IN BRICK OR MORTAR TO BE PATCHED

CONCRETE

<div>CC #</div> CRACKED CONCRETE, REFER TO DETAIL 4/S501; # INDICATES LINEAR FEET	<div>DC #</div> DELAMINATING CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET
<div>SC #</div> SPALLED CONCRETE, REFER TO DETAIL 1/S501; # INDICATES SQUARE FEET D = DEEP SPALL, REFER TO DETAIL 2/S501	

<div>BRICK MASONRY TO BE REBUILT; # INDICATES SQUARE FEET</div>

SEALANTS

<div>PS #</div> FAILED PERIMETER SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET	<div>FS #</div> FAILED SEALANT TO BE REPAIRED, REFER TO DETAIL 7/S501; # INDICATES LINEAR FEET
---	---

PAINT

<div>△</div> CLASS 3 PAINT DEFECT(PEELING PAINT); SUBSTRATE TO BE SCRAPED, PRIMED, AND PAINTED
--

SHEET NOTES

<div>◆</div> DEFECT NOTE; REFER TO REPAIR NOTES
--

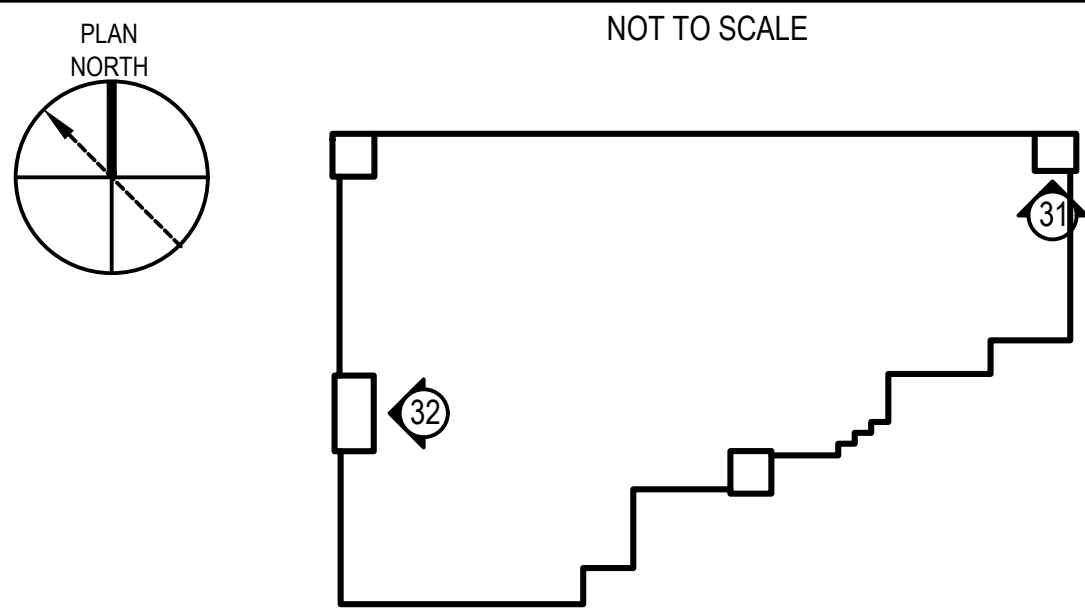
NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET

NOTE: REMOVE AND REPLACE EXISTING CONCRETE PARAPET CAPS TO MATCH EXISTING AT THE GEORGE A. AYOTTE GARAGE. INSTALL NEW CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL. REFER TO DETAIL 2/A701.

NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.

KEY PLAN

NOT TO SCALE



LEGEND:

<div>⓪</div>	ELEVATION SHOWN ON THIS PLAN
--------------	------------------------------



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RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY

PROJECT NO.	837920
CADD FILE	837920 A200s
DESIGNED BY	JVL
DRAWN BY	NCB
CHECKED BY	AEO/ACP
DATE	2/22/2022
DRAWING SCALE	NOT TO SCALE

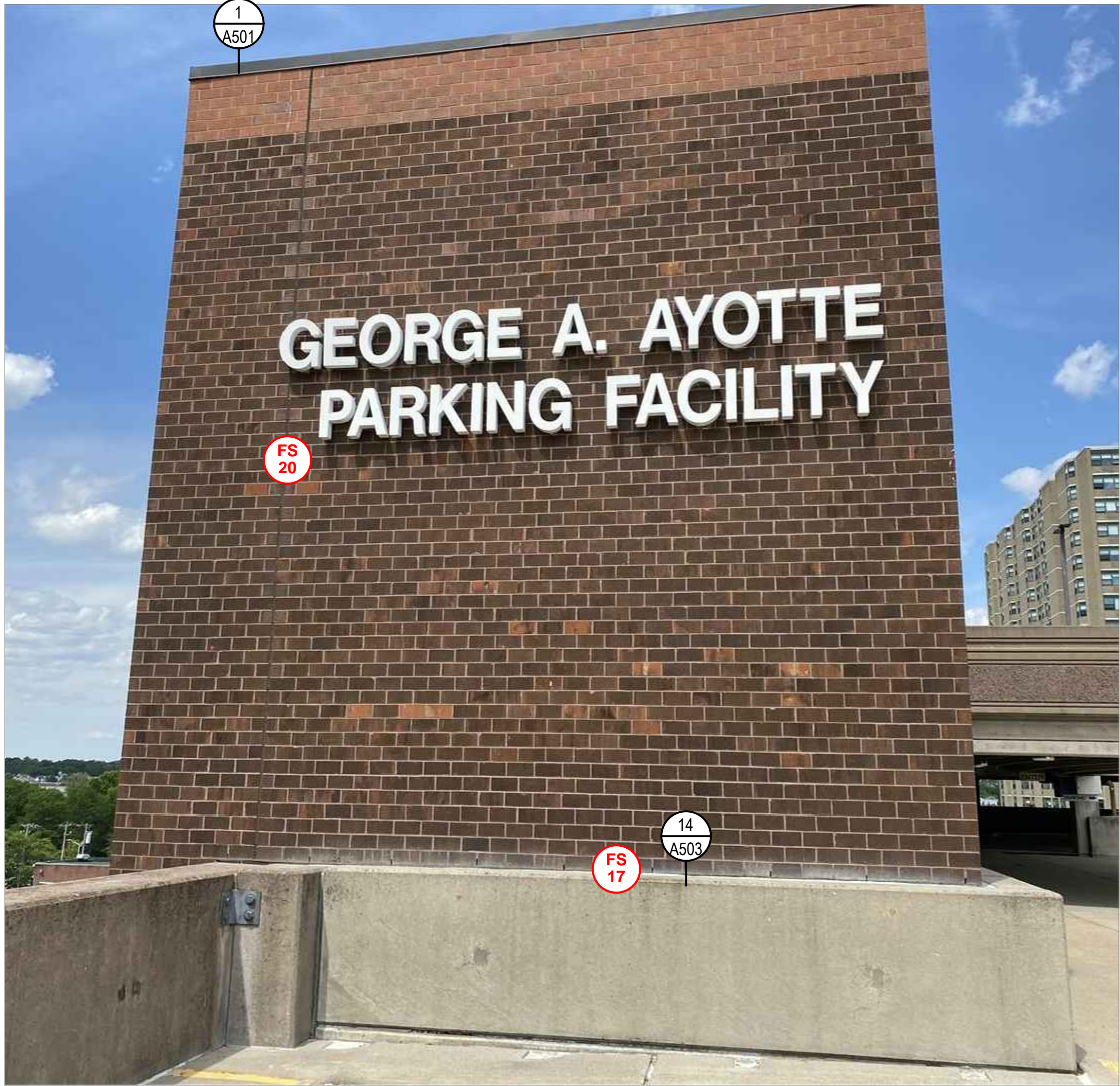
GRAPHIC SCALE

SHEET TITLE

GEORGE A AYOTTE
GARAGE PENTHOUSE
ELEVATIONS

DRAWING NO.

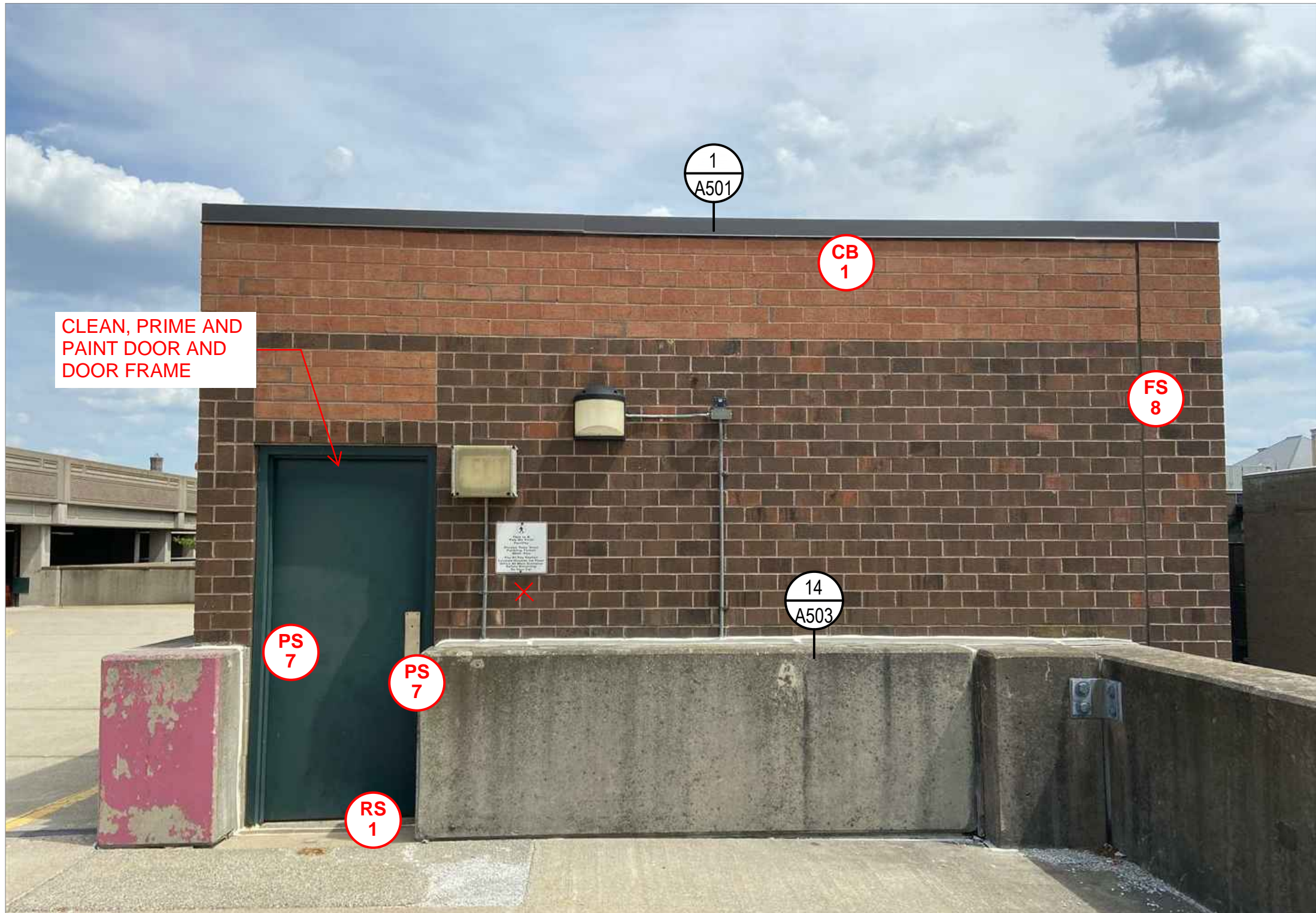
A213



33
A214

GEORGE A. AYOTTE GARAGE PENTHOUSE SOUTH ELEVATION

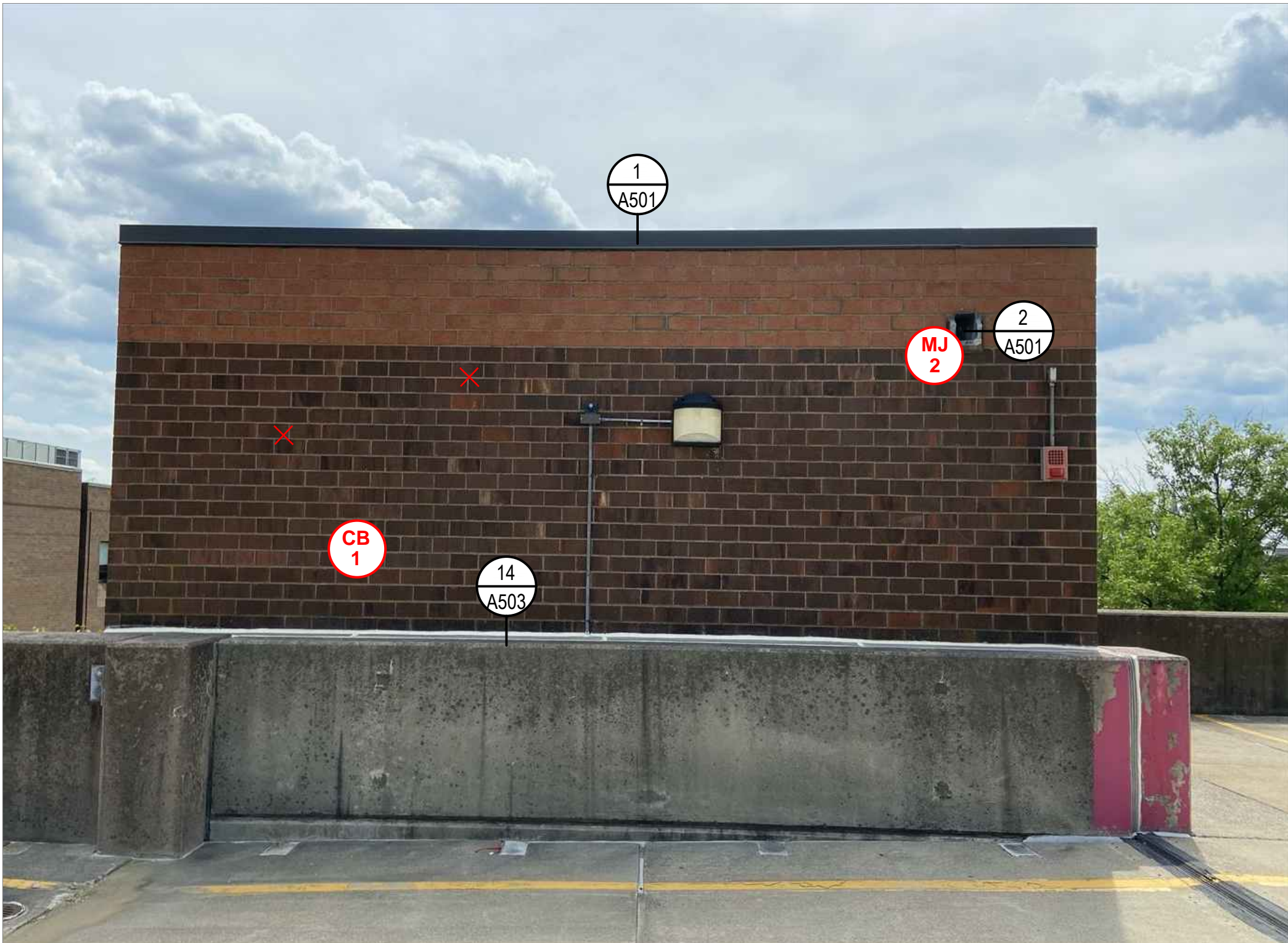
SCALE: NOT TO SCALE



34
A214

GEORGE A. AYOTTE GARAGE PENTHOUSE WEST ELEVATION

SCALE: NOT TO SCALE



35
A214

GEORGE A. AYOTTE GARAGE PENTHOUSE NORTH ELEVATION

SCALE: NOT TO SCALE

NOTE: REFER TO S100s FOR OVERALL DIMENSIONS.

ELEVATION NOTES

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REPAIR LEGEND

MASONRY

- CB**
#
- CRACKED BRICK TO BE REPLACED;
INDICATES UNITS
- SB**
#
- SPALLED BRICK TO BE REPLACED;
INDICATES UNITS
- DM**
#
- DETERIORATED MORTAR JOINT TO BE
REPOINTED, REFER TO DETAIL 1/A701;
INDICATES SQUARE FEET
- MJ**
#
- DETERIORATED MORTAR JOINT TO BE
REPOINTED, REFER TO DETAIL 1/A701;
INDICATES LINEAR FEET
- STEP CRACK TO BE REPAIRED
(APPROXIMATE SCALE);
INDICATES LINEAR FEET

- EF**
#
- EFFLORESCENCE TO BE CLEANED;
INDICATES SQUARE FEET
- VG**
#
- VEGETATIVE GROWTH TO BE CLEANED;
INDICATES SQUARE FEET
- AG**
#
- ALGAE GROWTH TO BE CLEANED;
INDICATES SQUARE FEET
- RS**
#
- RUST STAINING TO BE CLEANED;
INDICATES SQUARE FEET
- AS**
#
- ATMOSPHERIC STAINING TO BE
CLEANED; # INDICATES SQUARE FEET
- x**
- EXISTING ANCHOR/METAL STUB TO BE
REMOVED AND VOID IN BRICK OR
MORTAR TO BE PATCHED

- BRICK MASONRY TO BE REBUILT;
INDICATES SQUARE FEET

SEALANTS

- CC**
#
- CRACKED CONCRETE, REFER TO
DETAIL 4/S501;
INDICATES LINEAR FEET
- DC**
#
- DELAMINATING CONCRETE, REFER TO
DETAIL 1/S501;
INDICATES SQUARE FEET
- SC**
#
- SPALLED CONCRETE, REFER TO DETAIL
1/S501; # INDICATES SQUARE FEET
D = DEEP SPALL, REFER TO DETAIL
2/S501

- PS**
#
- FAILED PERIMETER SEALANT TO BE
REPAIRED, REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET
- FS**
#
- FAILED SEALANT TO BE REPAIRED,
REFER TO DETAIL 7/S501;
INDICATES LINEAR FEET

PAINT

- CLASS 3 PAINT DEFECT(PEELING PAINT);
SUBSTRATE TO BE SCRAPPED, PRIMED,
AND PAINTED

SHEET NOTES

- DEFECT NOTE;
REFER TO REPAIR NOTES

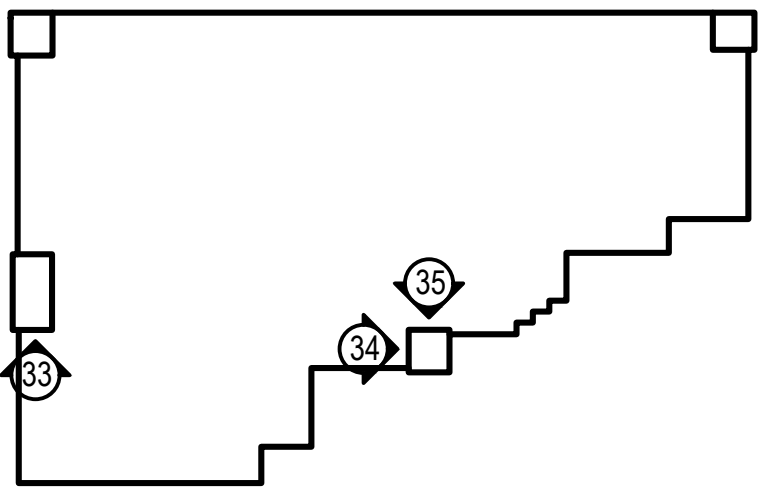
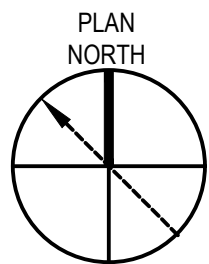
NOTE: NOT ALL DEFECTS SHOWN IN THE LEGEND MAY BE PRESENT ON THIS SHEET

NOTE: REMOVE AND REPLACE EXISTING CONCRETE PARAPET CAPS TO MATCH EXISTING AT THE GEORGE A. AYOTTE GARAGE. INSTALL NEW CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL. REFER TO DETAIL 2/A701.

NOTE: MASONRY ELEVATIONS TO BE CLEANED 100%. SPECIFIC STAINING DEFECTS HAVE BEEN NOTED ON PLANS. THE REMAINING FACADE IS TO BE CLEANED TO REMOVE DIRT AND DEBRIS TO MATCH THE NEWLY CLEANED AREAS OF THE FACADE.

KEY PLAN

NOT TO SCALE



LEGEND:

- ELEVATION SHOWN ON THIS PLAN



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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
NO.	DATE	DESCRIPTION	BY

PROJECT NO.	837920
CADD FILE	837920 A200s
DESIGNED BY	JVL
DRAWN BY	NCB
CHECKED BY	AEI/ACP
DATE	2/22/2022
DRAWING SCALE	AS NOTED

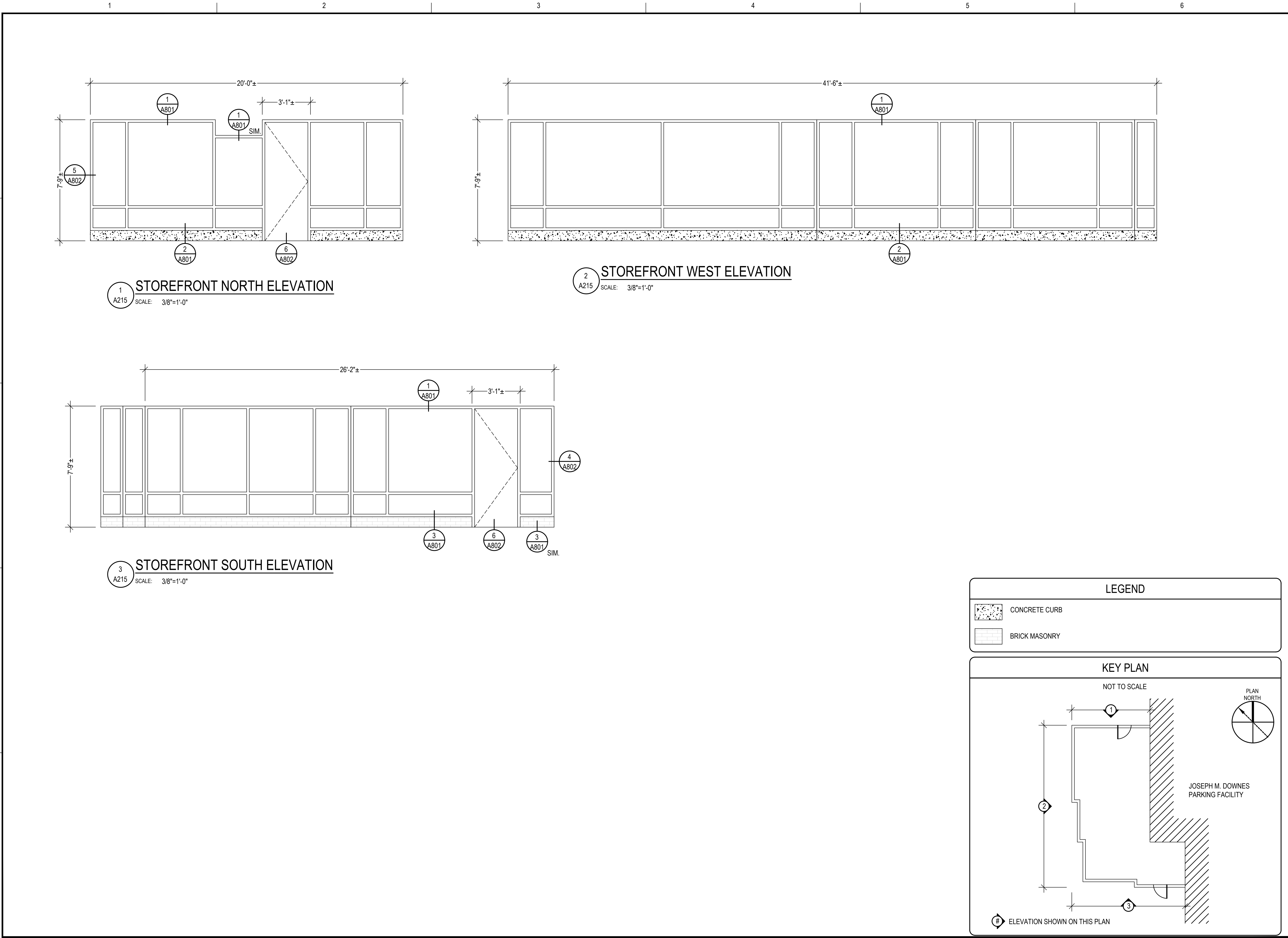
GRAPHIC SCALE

SHEET TITLE

GEORGE A AYOTTE
GARAGE PENTHOUSE
ELEVATIONS

DRAWING NO.

A214



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PROJECT

OWNER

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A200s		
DESIGNED BY	JVL		
DRAWN BY	NCB		
CHECKED BY	AE0/ACP		
DATE	2/22/2022		
DRAWING SCALE	3/8"=1'-0"		

GRAPHIC SCALE

0 8' 16' 32'

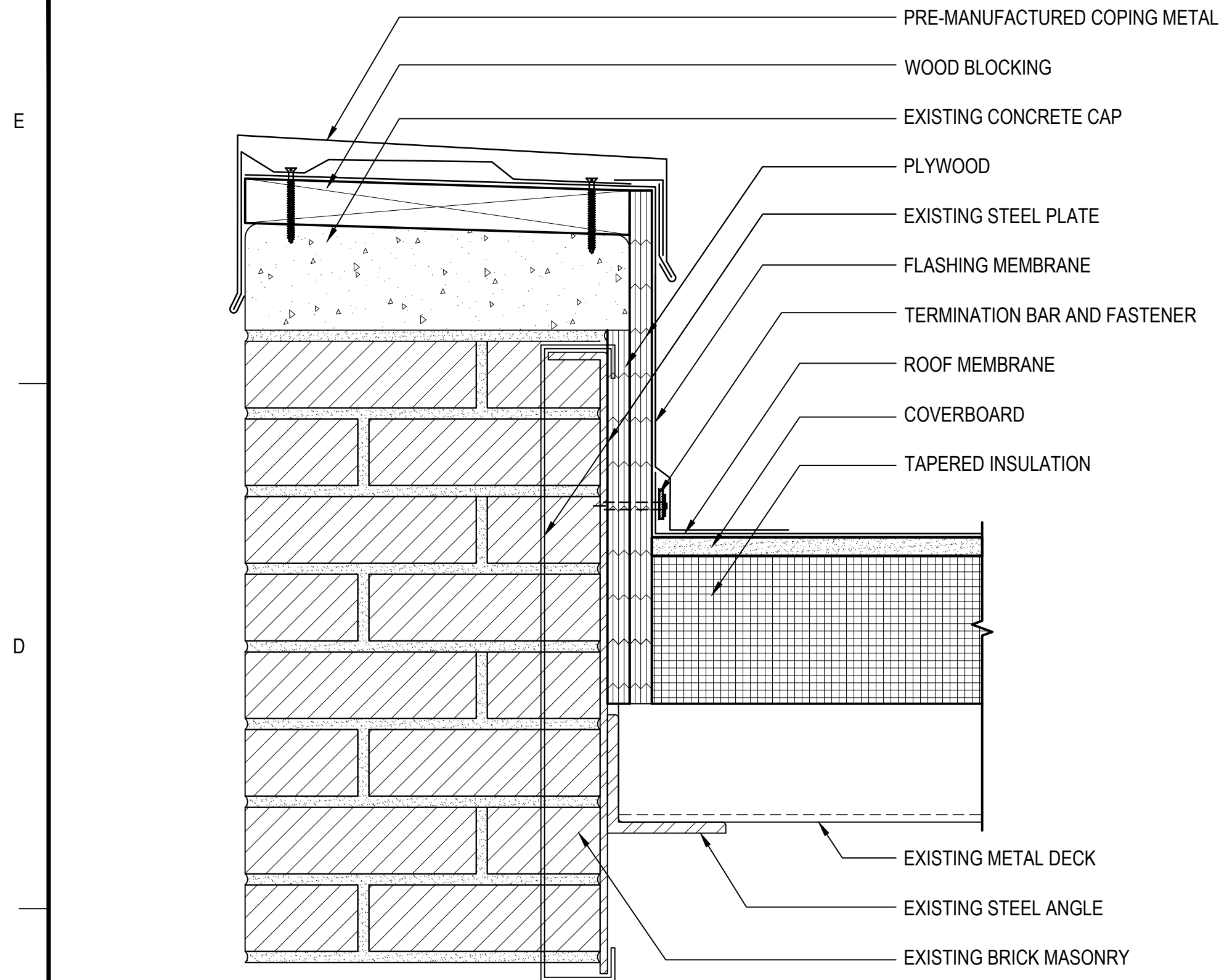
SHEET TITLE

JOSEPH M. DOWNES
GARAGE STOREFRONT
ELEVATIONS

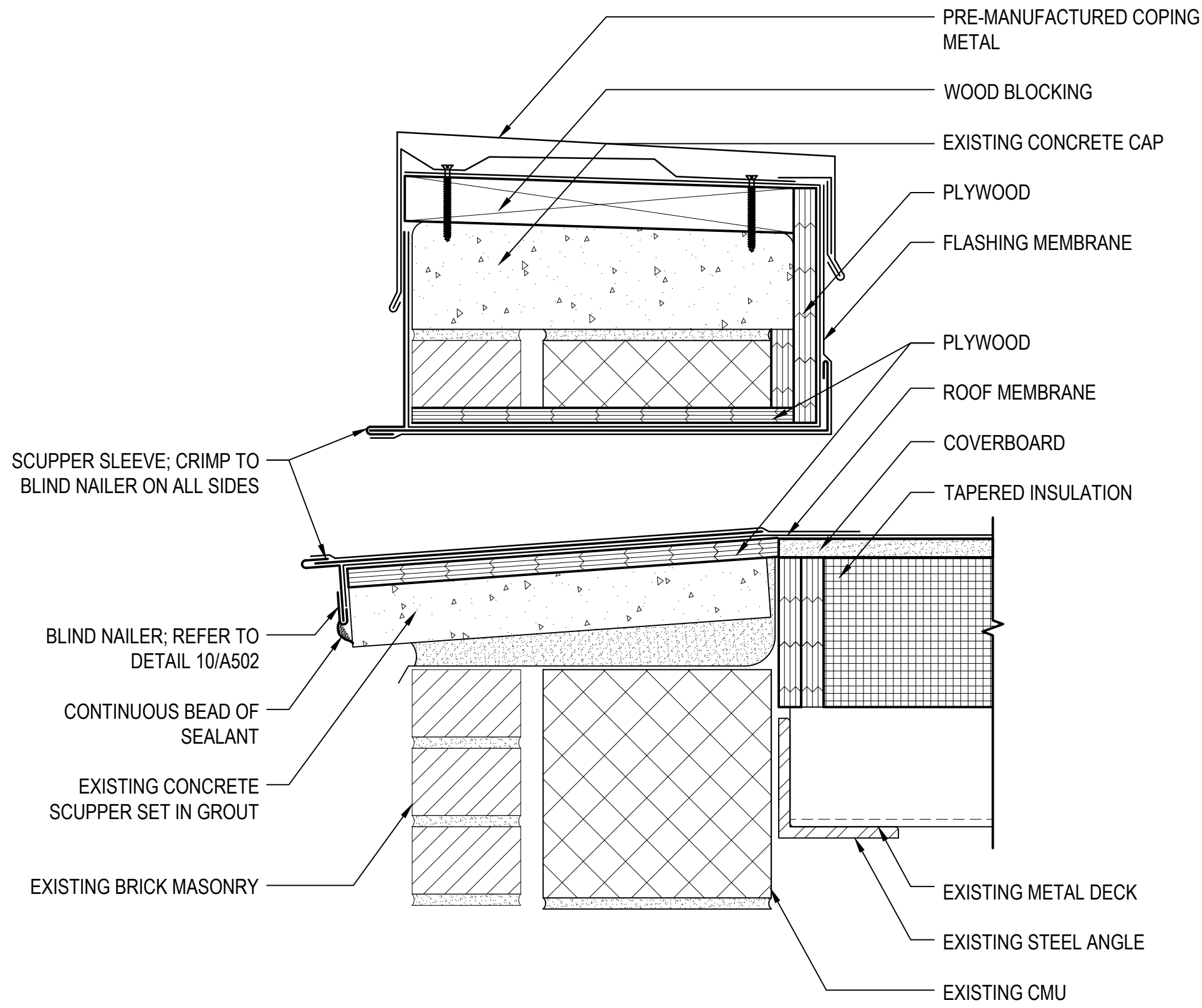
DRAWING NO.

A215

NOTE: ALL WORK ON THIS SHEET IS THE RESPONSIBILITY OF THE ROOFING SUBCONTRACTOR UNLESS OTHERWISE NOTED.

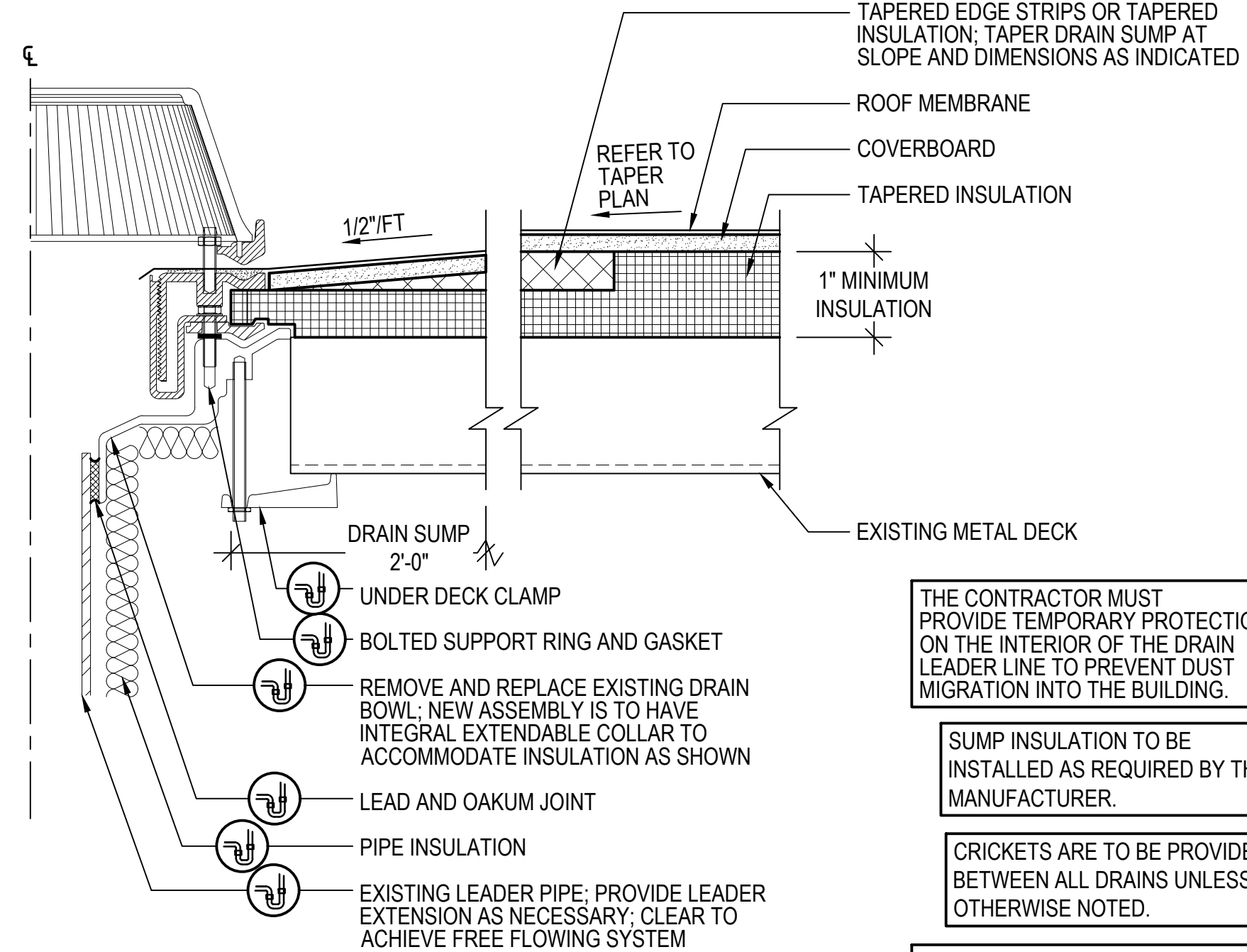


1 ROOF EDGE DETAIL - AYOTTE GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



2 THROUGHWALL SCUPPER - AYOTTE GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

REFER TO DETAIL 10/A502 FOR BLIND NAILER



3 ROOF DRAIN DETAIL - AYOTTE GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

THE CONTRACTOR MUST PROVIDE TEMPORARY PROTECTION ON THE INTERIOR OF THE DRAIN LEADER LINE TO PREVENT DUST MIGRATION INTO THE BUILDING.

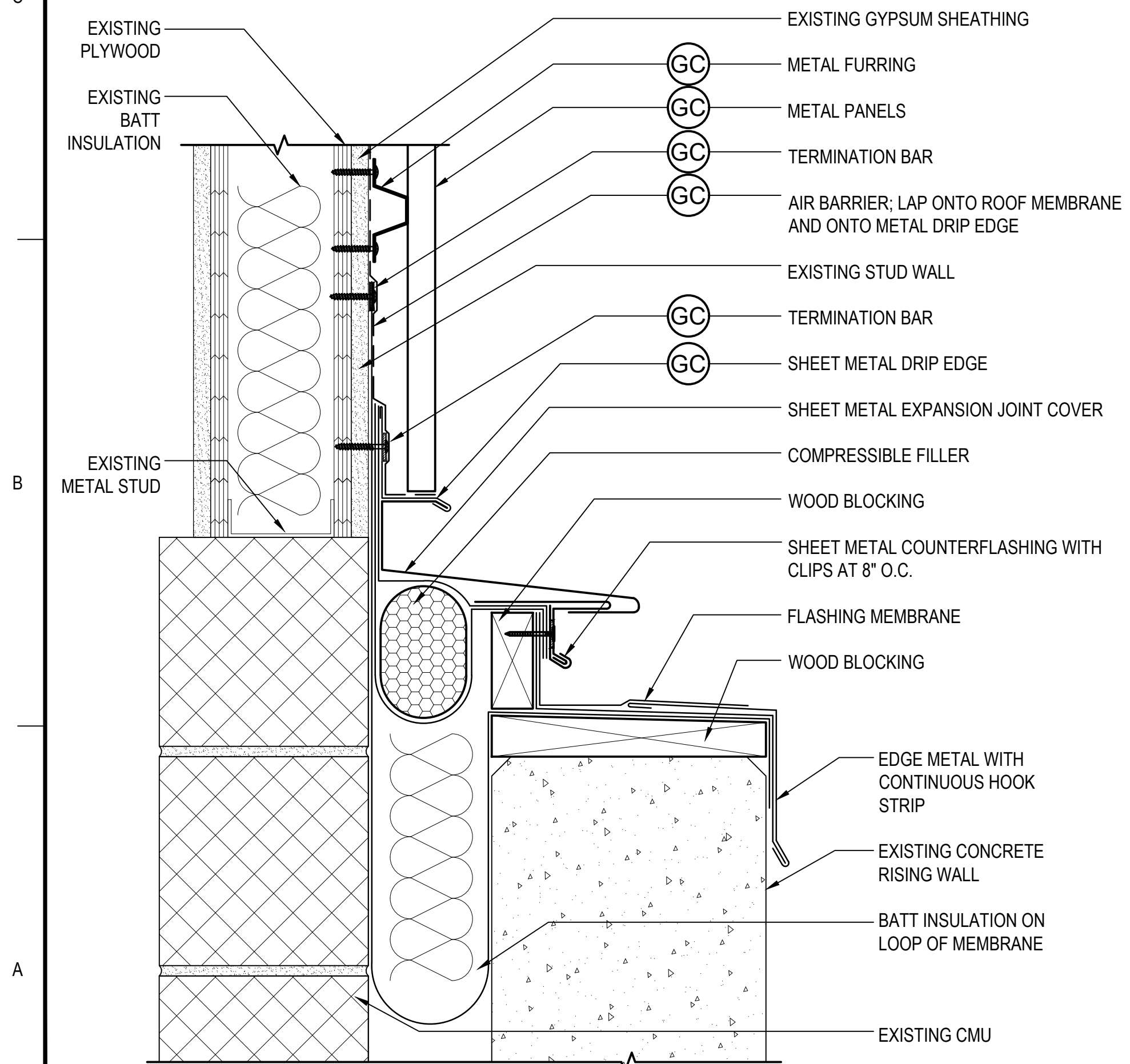
SUMP INSULATION TO BE INSTALLED AS REQUIRED BY THE MANUFACTURER.

CRICKETS ARE TO BE PROVIDED BETWEEN ALL DRAINS UNLESS OTHERWISE NOTED.

CLEAN DRAINS PRIOR TO AND AFTER COMPLETION OF THE ROOFING OPERATION.

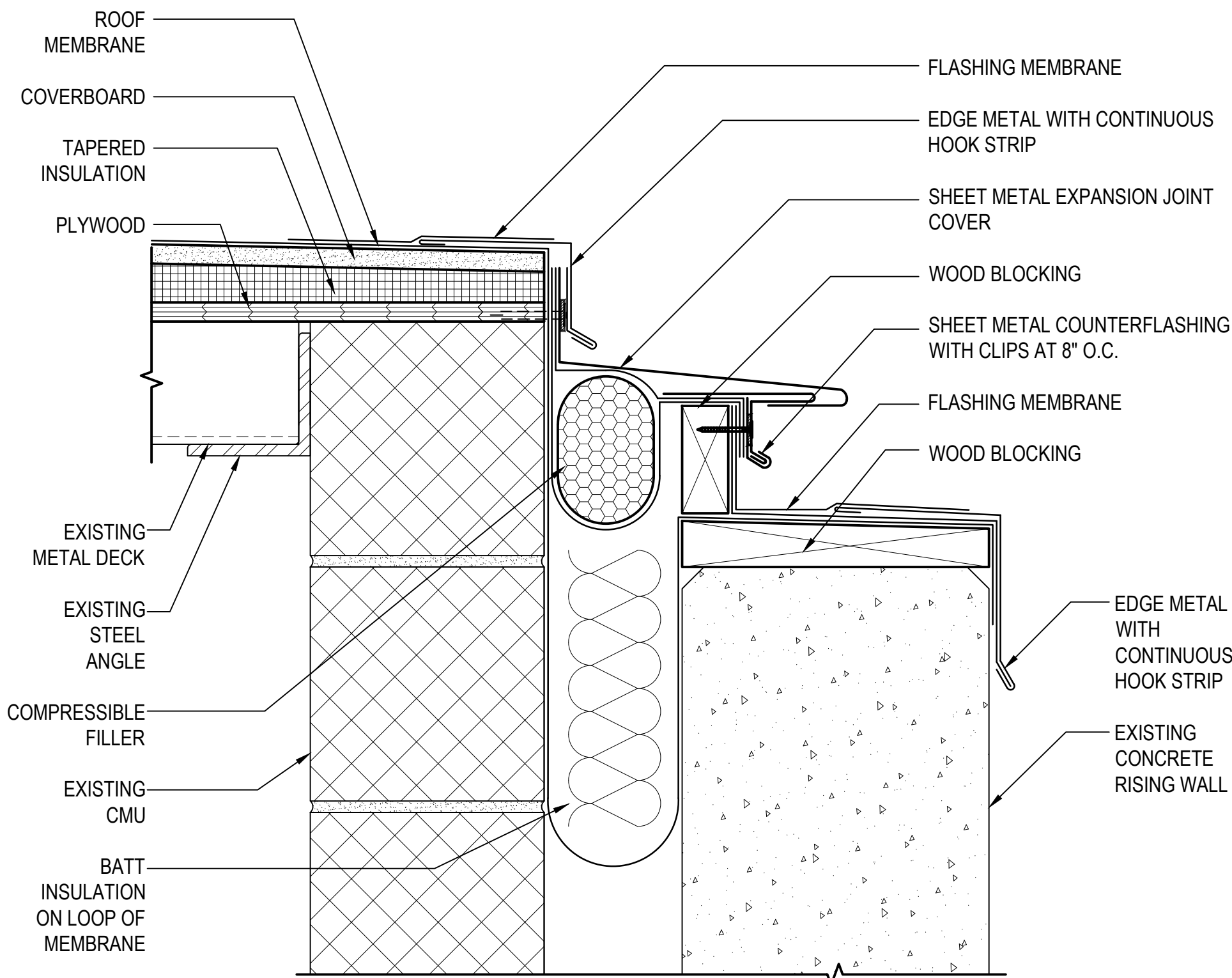
WORK DESIGNATION SYMBOLS

PLUMBING SUBCONTRACTOR

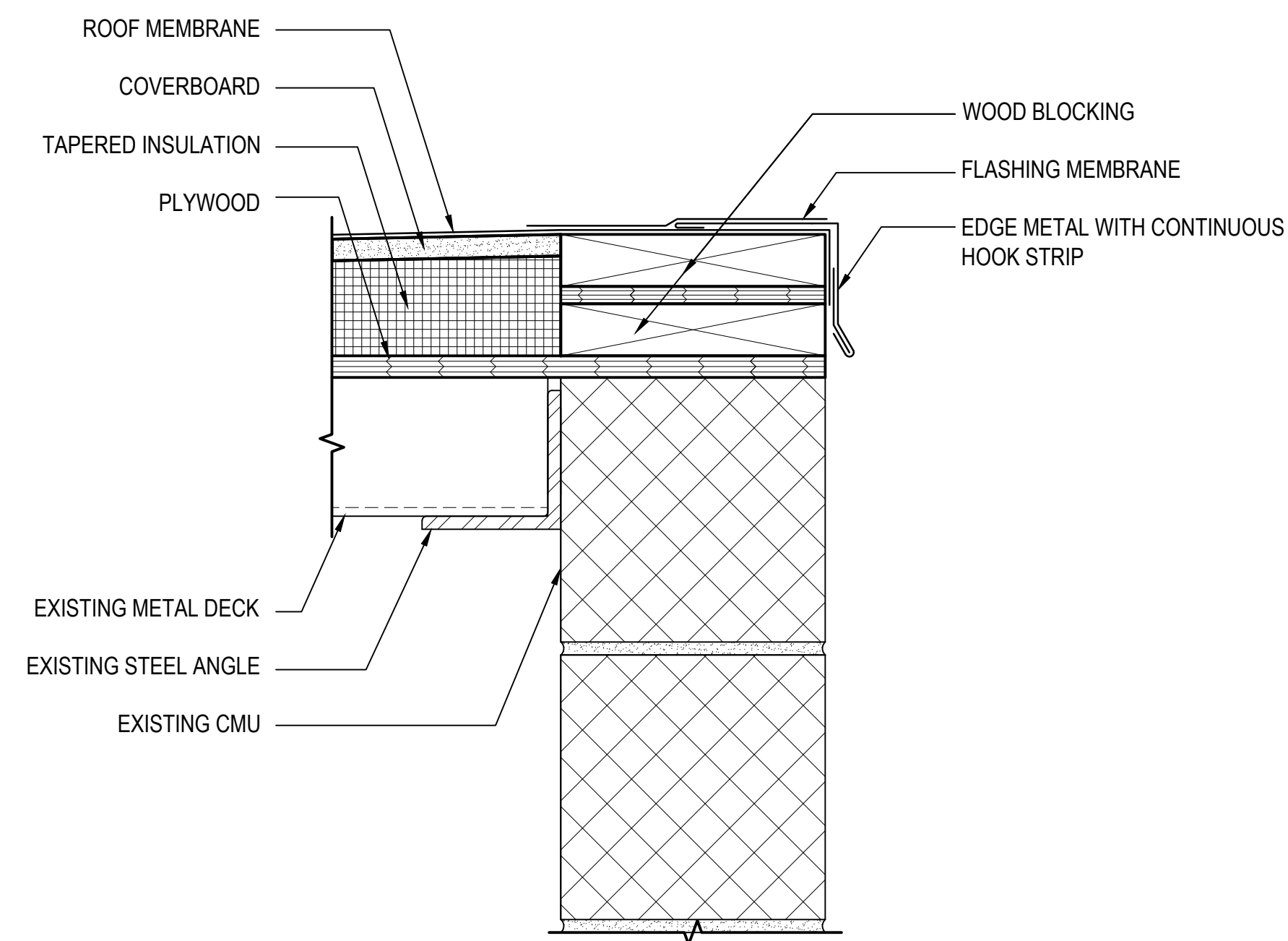


4 PENTHOUSE EXPANSION JOINT - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

WORK DESIGNATION SYMBOLS
GC GENERAL CONTRACTOR



5 PENTHOUSE EXPANSION JOINT - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



6 PENTHOUSE ROOF EDGE - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A500s		
DESIGNED BY	JVL		
DRAWN BY	JVL		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	3"=1'-0"		

GRAPHIC SCALE
0 3" 6" 9"

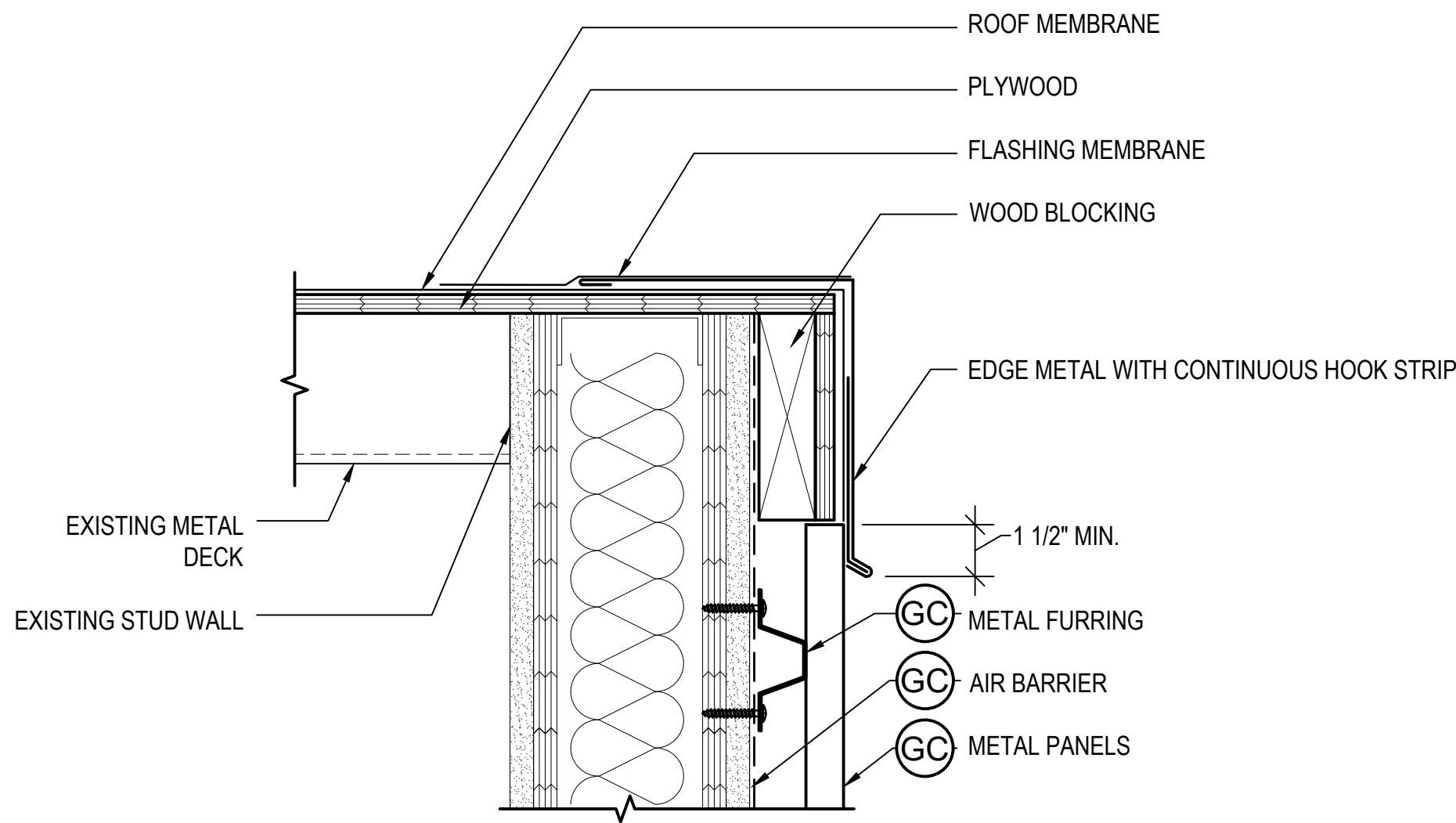
SHEET TITLE

ROOF
DETAILS

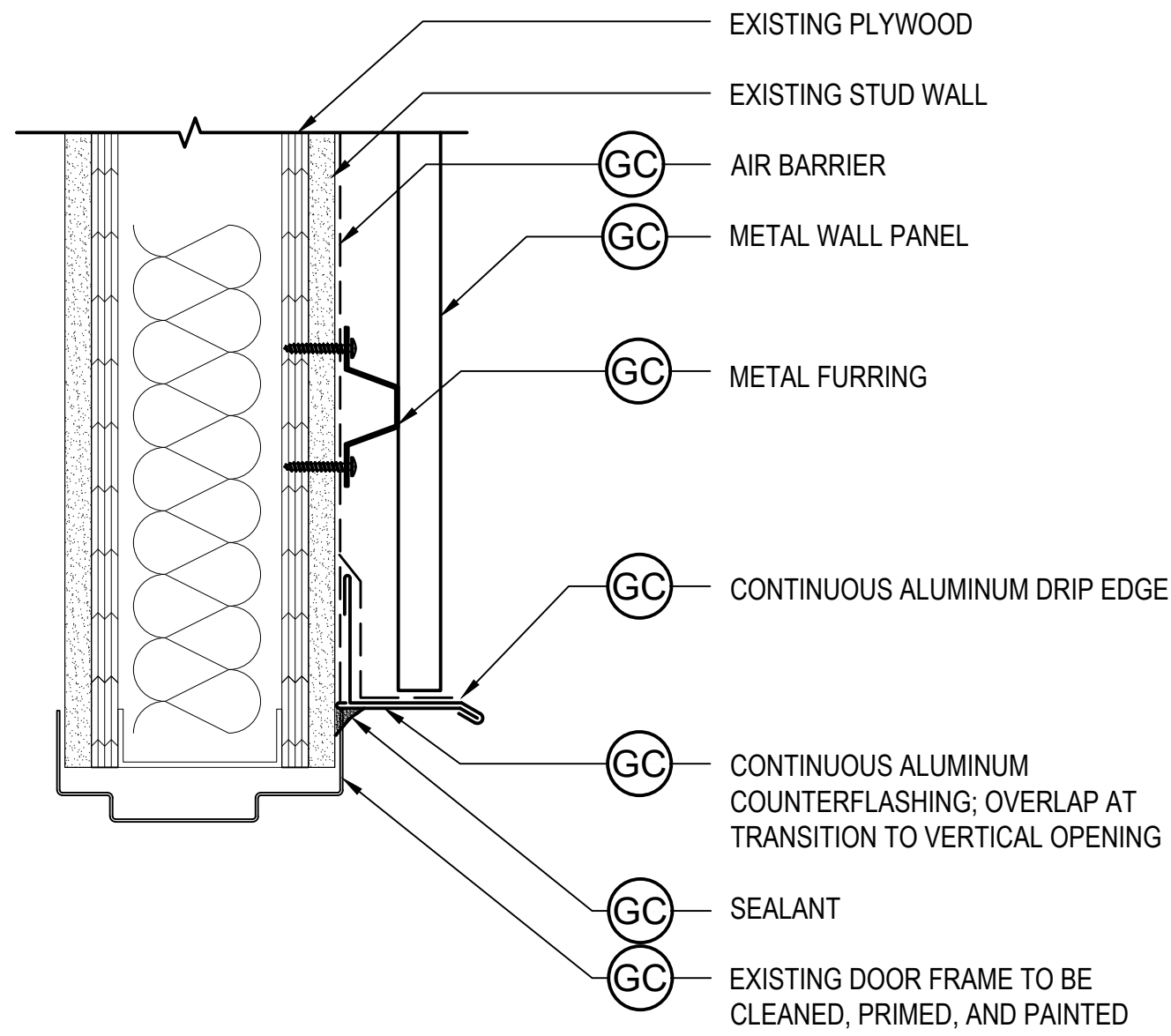
DRAWING NO.

A501

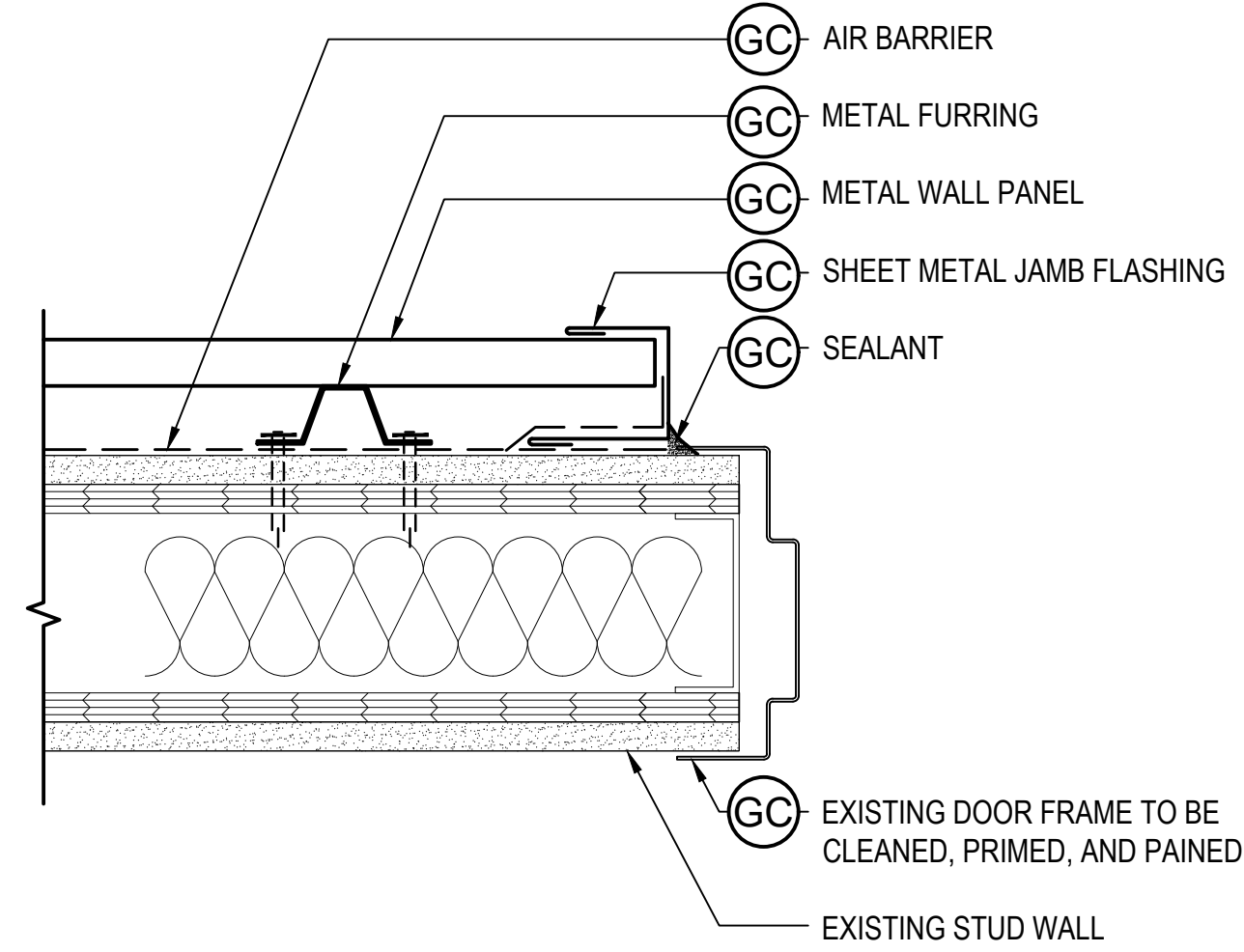
NOTE: ALL WORK ON THIS SHEET IS THE RESPONSIBILITY OF THE ROOFING SUBCONTRACTOR UNLESS OTHERWISE NOTED.



7 ROOF EDGE DETAIL - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

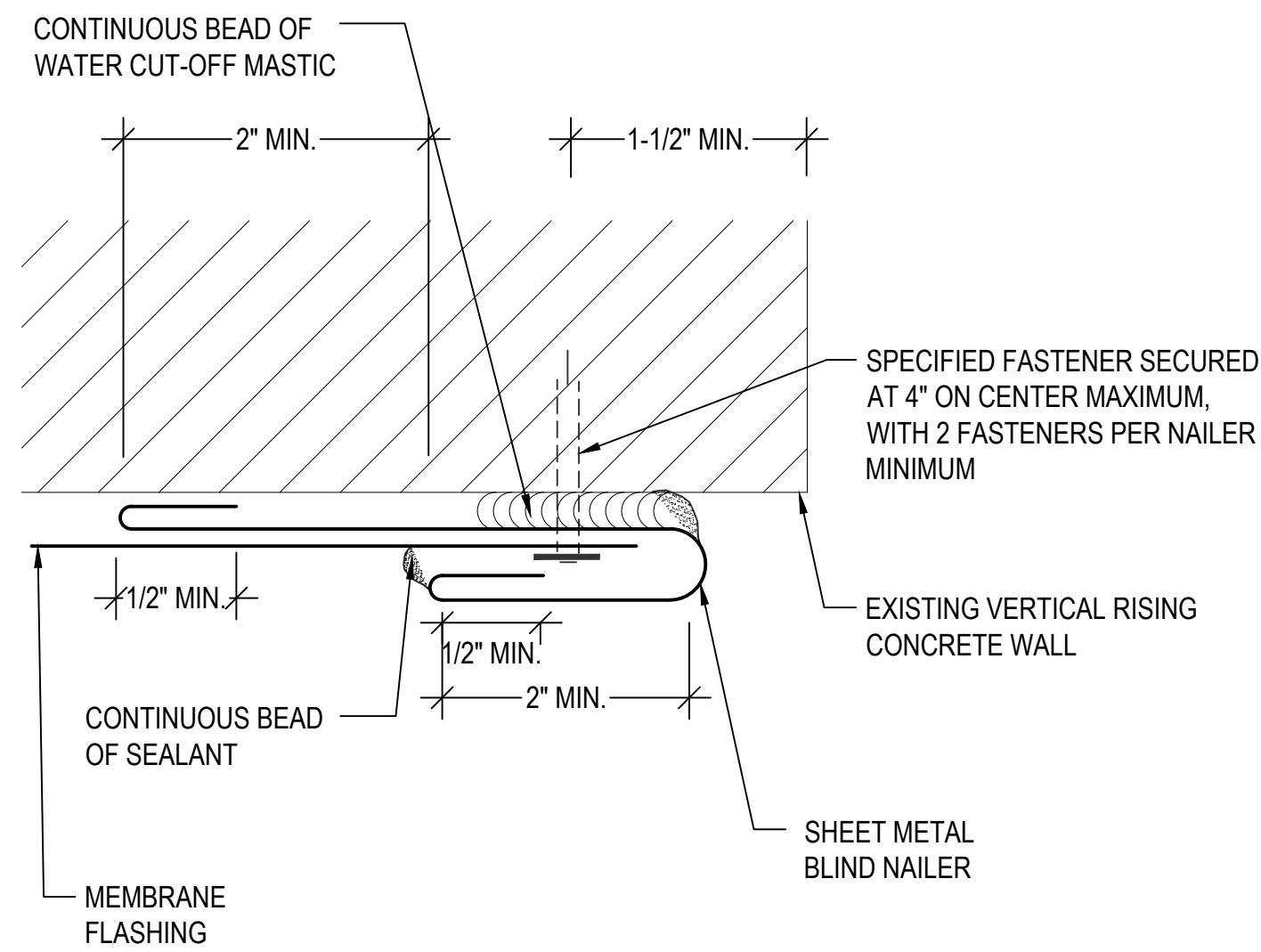


8 DOOR HEAD DETAIL - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



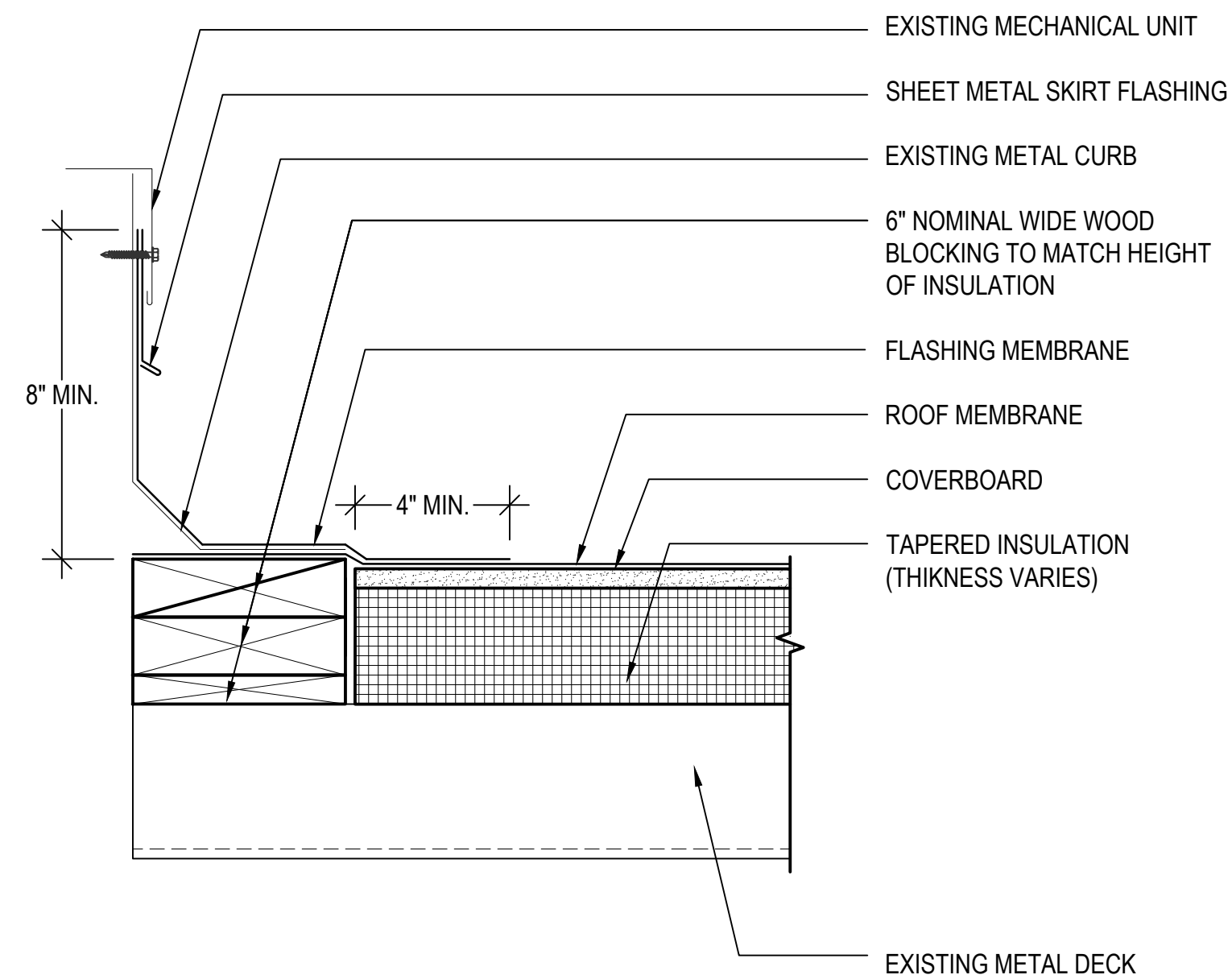
9 DOOR JAMB DETAIL - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

PLEASE NOTE THAT THIS DETAIL IS NOT INDICATED AT ALL LOCATIONS ON THE ROOF AREA PLANS OR ELEVATIONS.

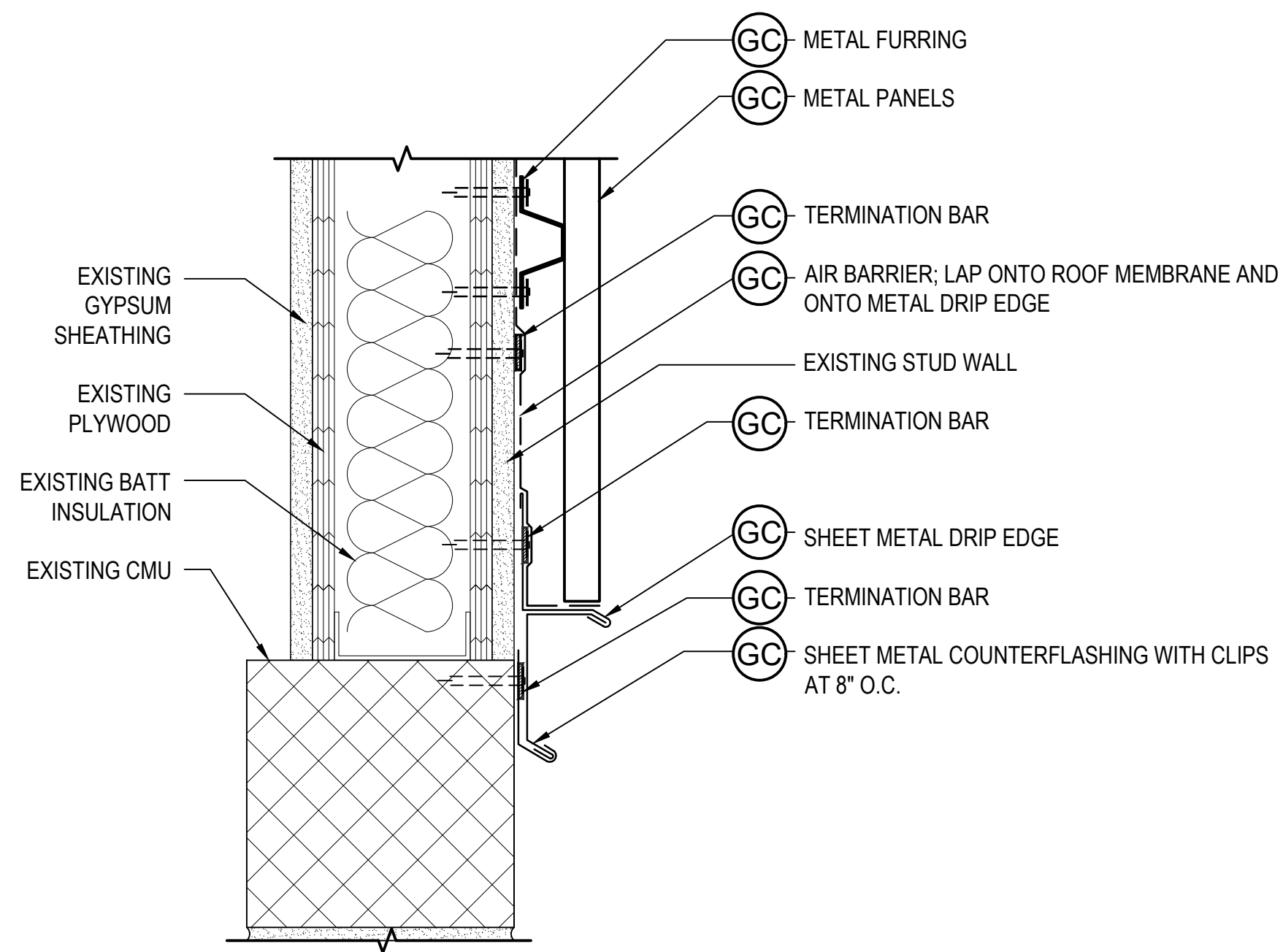


10 TYPICAL BLIND NAILER
SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

- ALL DISCONNECTS/RECONNECTS SHALL BE PERFORMED BY LICENSED TRADES PERSONS.
- TEMPORARILY DISCONNECT AND EXTEND ALL ELECTRICAL AND MECHANICAL LINES/UNITS AS REQUIRED TO RAISE THE UNITS TO ACCOMMODATE THE FINAL FINISHED ROOF HEIGHT.
- RESECURE UNIT HOOD WITH STAINLESS STEEL FASTENERS THROUGH EPDM BACKED STAINLESS STEEL WASHERS.



11 TYPICAL FAN/VENT FLASHING
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



12 METAL WALL PANEL DETAIL
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



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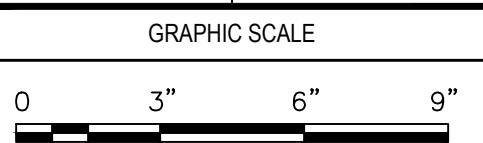
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DRAWN BY	JVL		
CHECKED BY	AE0/ACP		
DATE	2/22/2022		
DRAWING SCALE	3"=1'-0"		



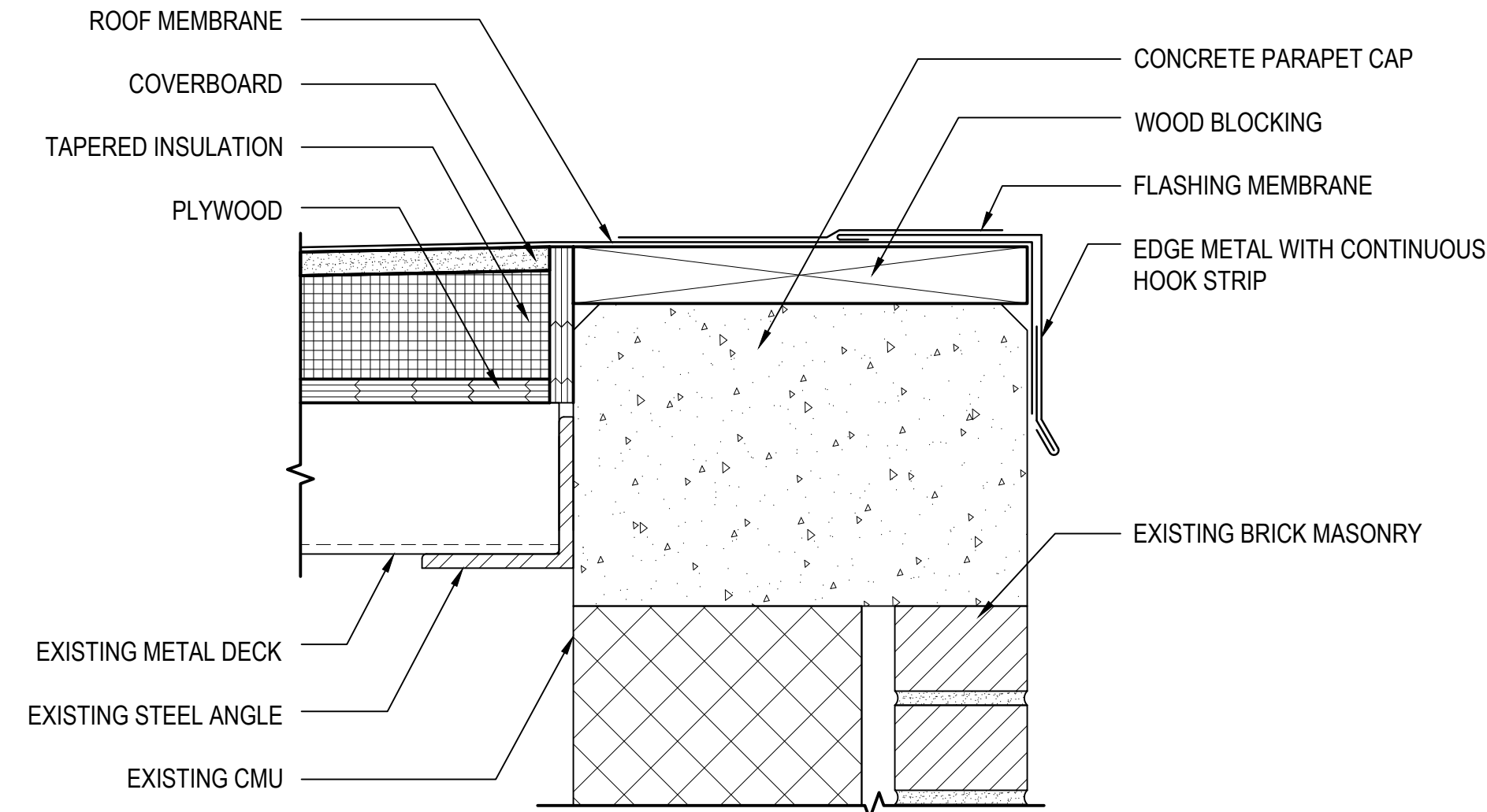
SHEET TITLE

ROOF
DETAILS

DRAWING NO.

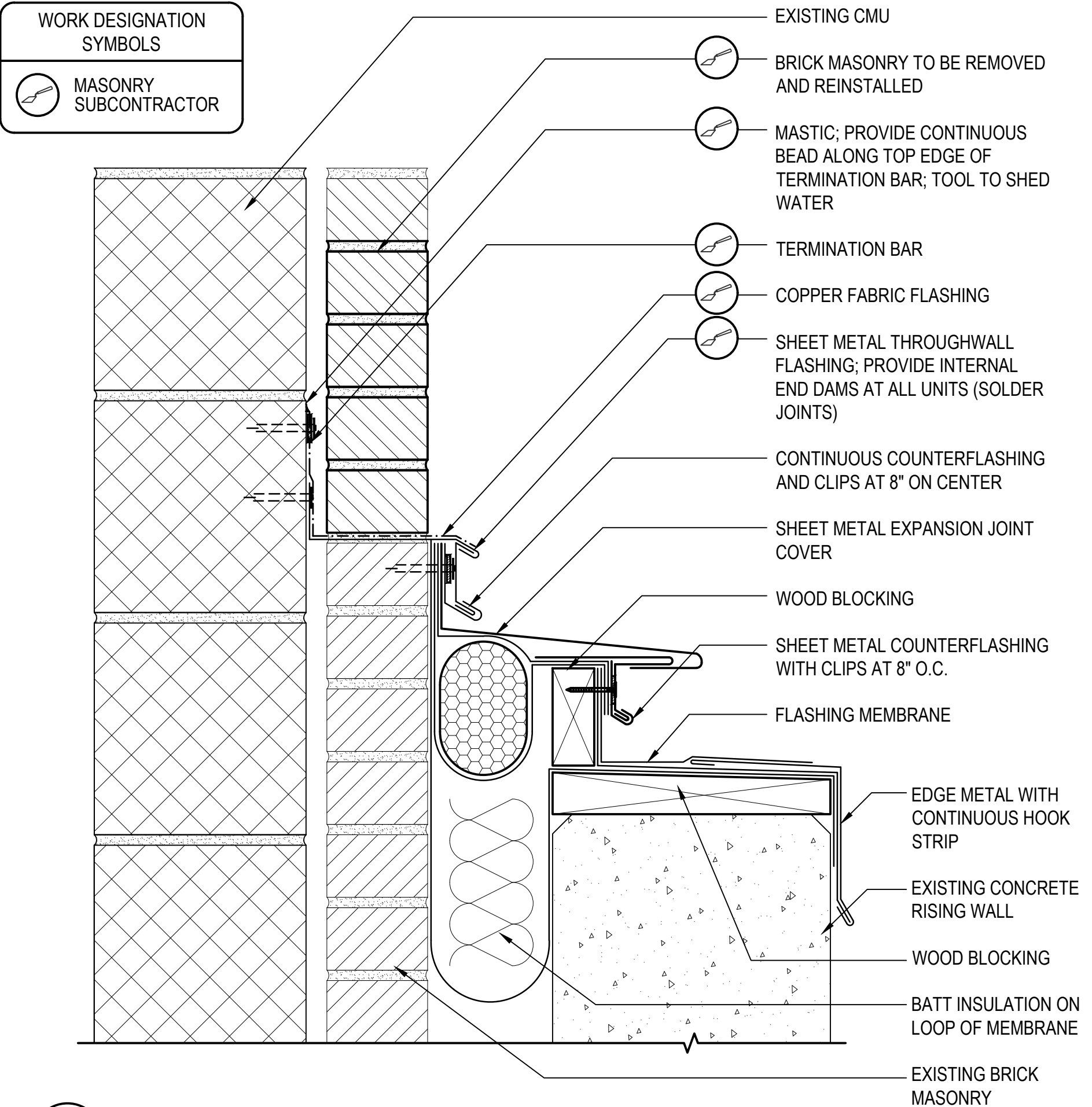
A502

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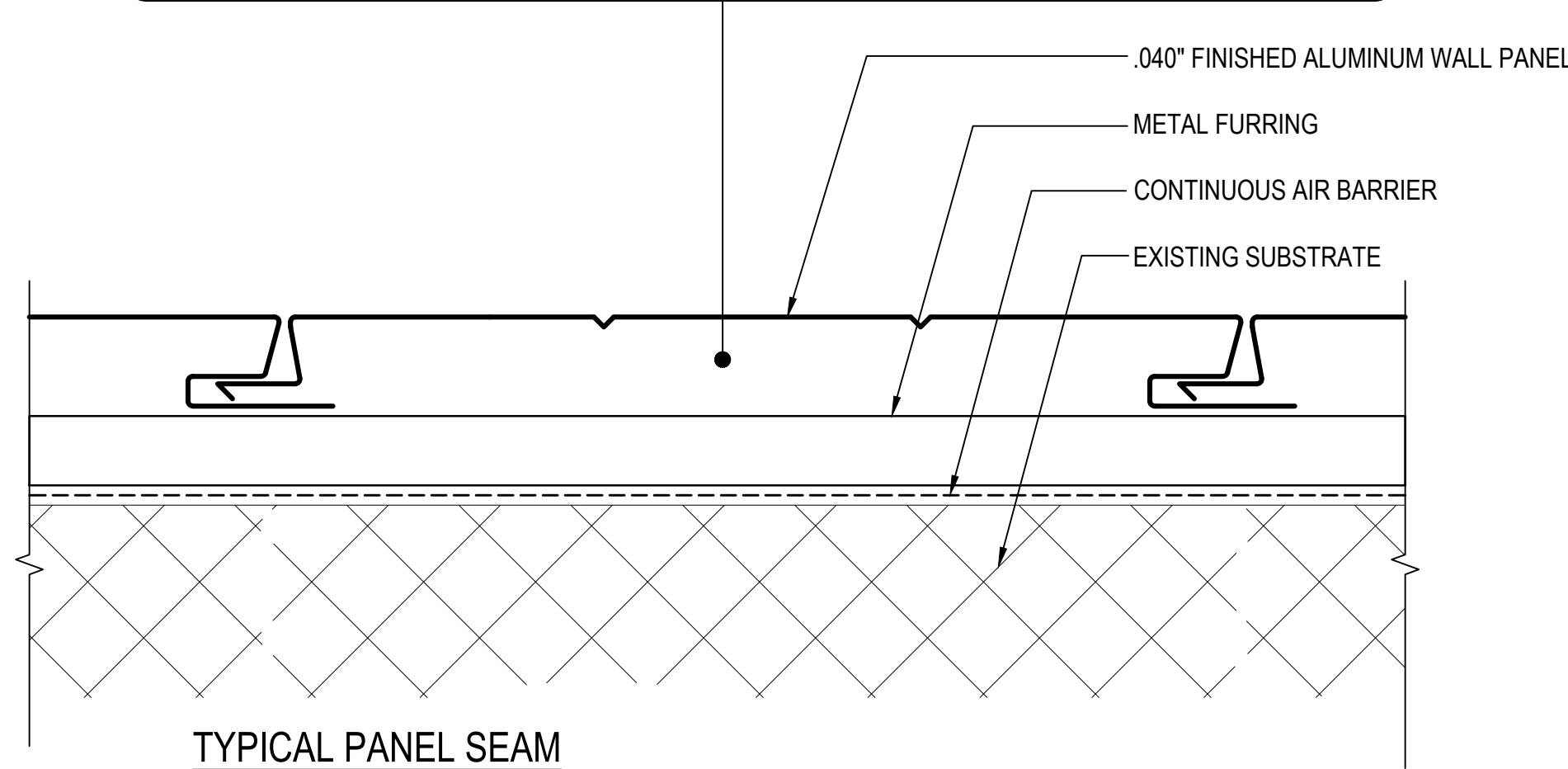
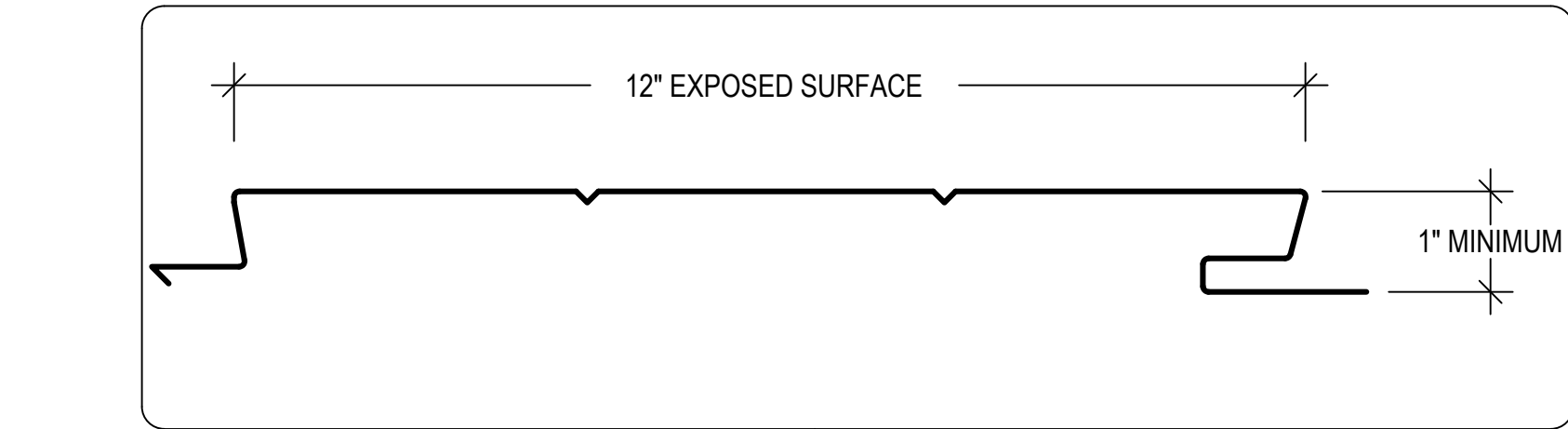


13 ROOF EDGE DETAIL - DOWNES GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

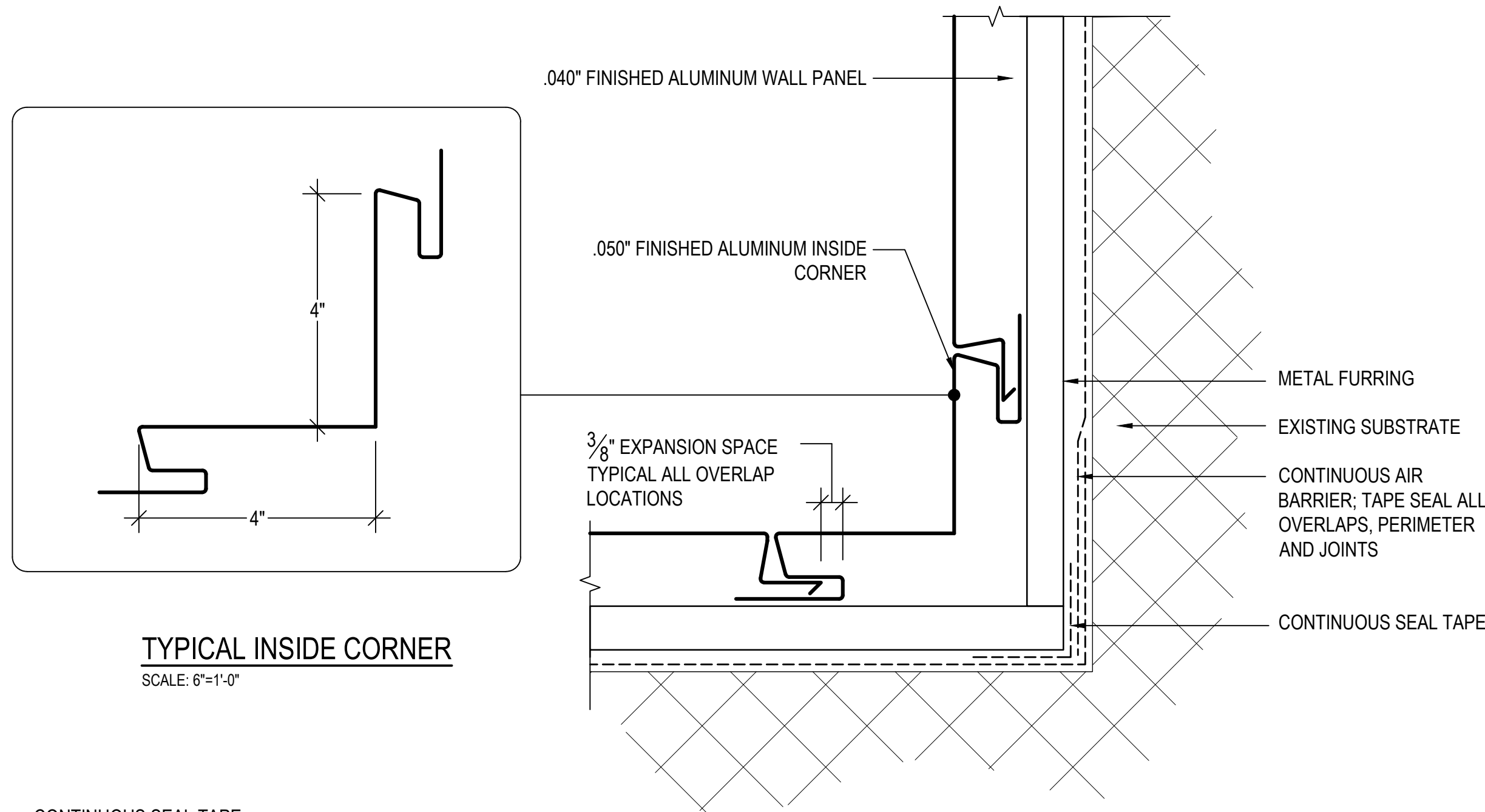
WORK DESIGNATION SYMBOLS
MASONRY SUBCONTRACTOR



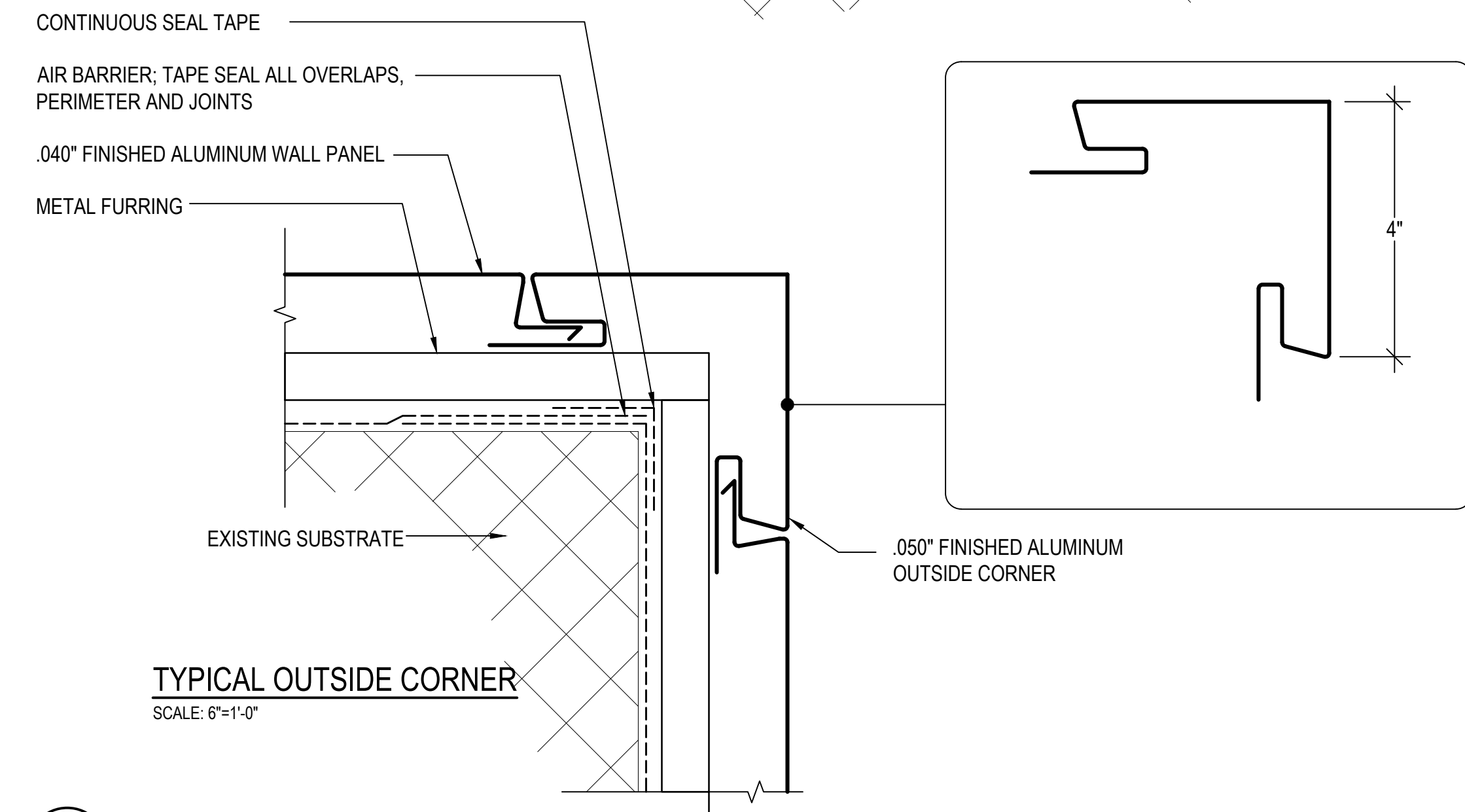
14 EXPANSION JOINT DETAIL - AYOTTE GARAGE
SCALE: 3"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



TYPICAL PANEL SEAM
SCALE: 6"=1'-0"

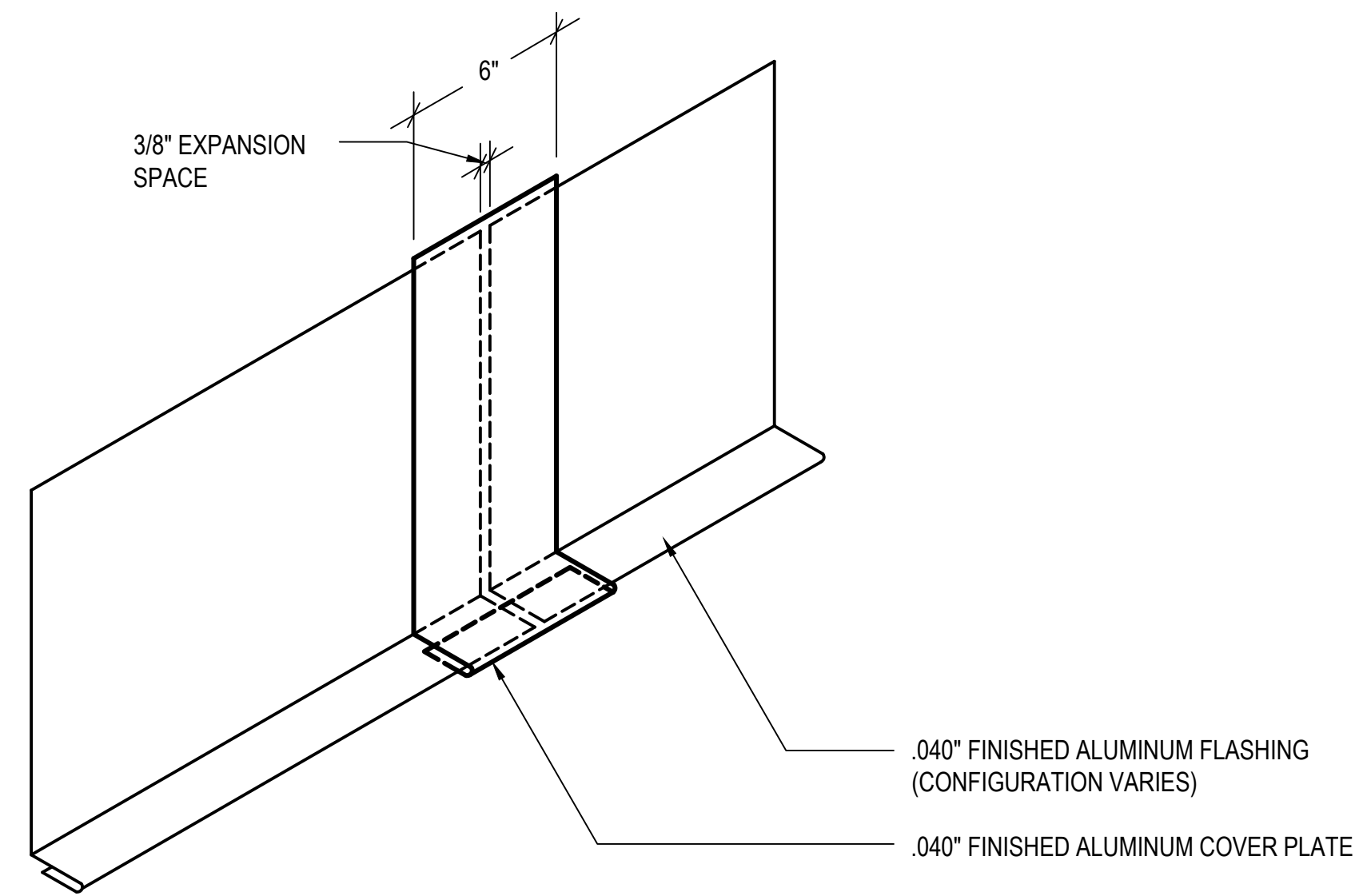
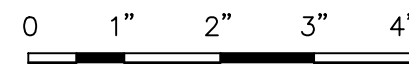


TYPICAL INSIDE CORNER
SCALE: 6"=1'-0"



TYPICAL OUTSIDE CORNER
SCALE: 6"=1'-0"

15 TYPICAL METAL PANEL DETAILS
SCALE: 6"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



TYPICAL COVER PLATE
SCALE: 6"=1'-0"

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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A500s		
DESIGNED BY	JVL		
DRAWN BY	JVL		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	AS NOTED		

GRAPHIC SCALE

SHEET TITLE

ROOF
DETAILS

DRAWING NO.

A503

MORTAR COLOR VARIES ACROSS ELEVATION. COLOR TO BE SELECTED BY THE OWNER. COLOR PUCKS MAY BE REQUIRED FOR COMPARISON OF INDIVIDUAL AREAS.

BRICK AND STONE MASONRY ARE TO BE SPOT REPOINTED. TOOL JOINTS TO MATCH THE EXISTING SURROUNDING JOINT PROFILES.

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR, WHICH EVER IS GREATER

GRIND OUT NARROW LINE ALONG THE CENTER OF JOINT. EDGES AND SIDES OF BRICK UNIT SHALL NOT BE DAMAGED DURING MORTAR GRINDING

EXISTING BRICK FACING

EXISTING MORTAR

GRIND OUT NARROW LINE ALONG THE CENTER OF JOINT. EDGES AND SIDES OF BRICK UNIT SHALL NOT BE DAMAGED DURING MORTAR GRINDING.

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR, WHICH EVER IS GREATER

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR.

EXISTING MORTAR

EXISTING BRICK FACING

REMOVE CEMENT MORTAR FROM WIDTH OF JOINT BY CUTTING, USING HAND HELED OR LIGHT PNEUMATIC TOOLS ONLY. REMOVE ALL MORTAR WITHOUT DAMAGING OR REMOVING THE BRICK EDGES OR WIDENING JOINTS

REMOVE EXISTING CEMENT MORTAR UP TO 1" OR 3 X WIDTH, OR TO ORIGINAL SOUND MORTAR.

ALL WORK ASSOCIATED WITH THIS DETAIL TO BE PERFORMED BY THE MASONRY CONTRACTOR, UNLESS DESIGNATED OTHERWISE.

1 BRICK MASONRY REPOINTING

SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



EXISTING BRICK FACING

APPLY PRE HYDRATED POINTING MORTAR IN 1/4" DEEP LAYERS AFTER PREVIOUS LAYER HAS BEEN TOOLED. TOOL MORTAR WHEN IT BECOMES "THUMBPRINT" HARD.

MOISTEN ALL JOINTS AND ALLOW SURFACE TO DRY PRIOR TO THE APPLICATION OF THE FIRST LAYER OF MORTAR. MORTAR TO BE TOOLED WHEN "THUMBPRINT" HARD.

STEP 3

EXISTING MORTAR

EXISTING BRICK FACING

APPLY PRE HYDRATED POINTING MORTAR IN 1/4" DEEP LAYERS AFTER PREVIOUS LAYER HAS BEEN TOOLED. TOOL MORTAR WHEN IT BECOMES "THUMBPRINT" HARD.

STEP 4

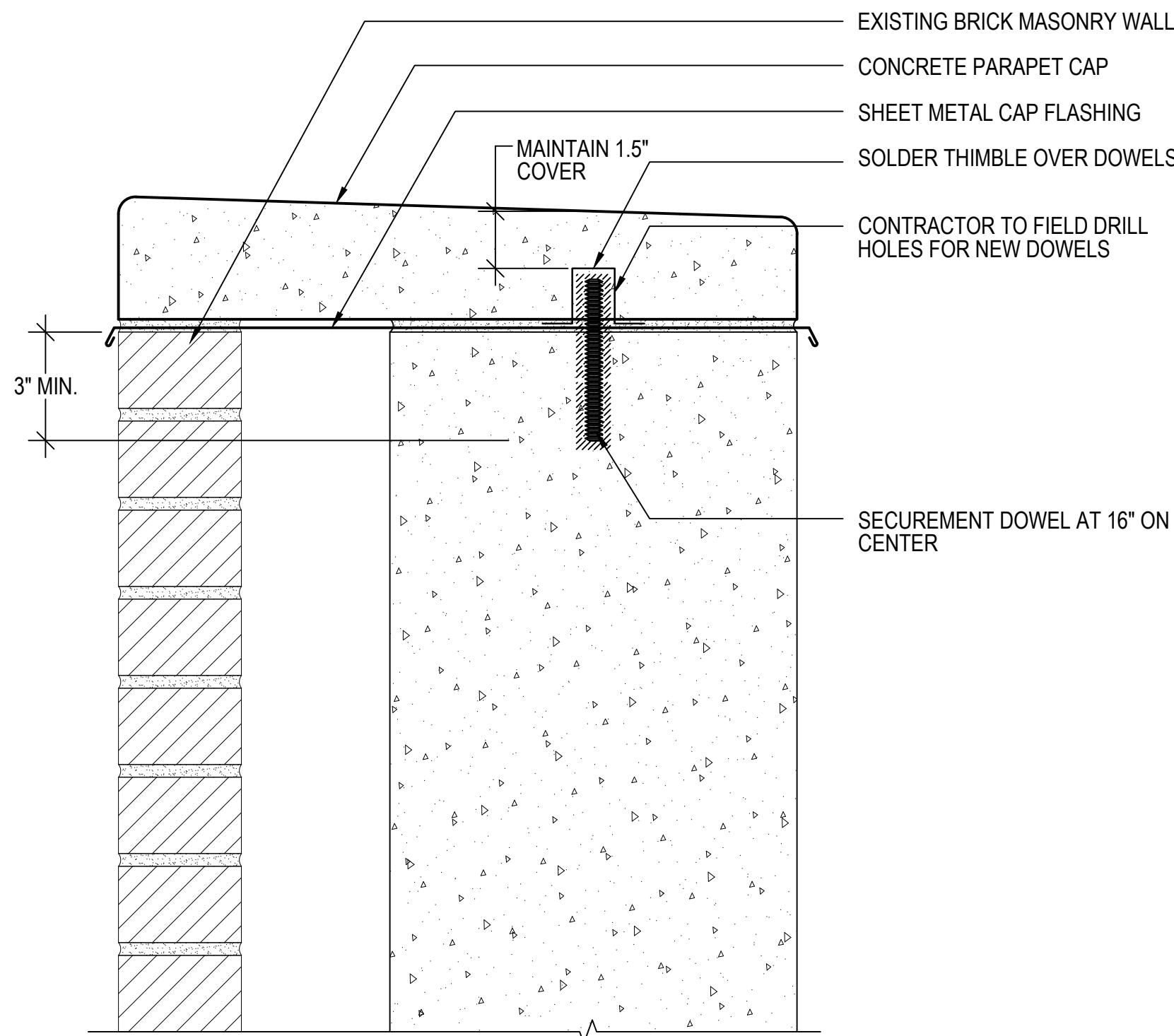
EXISTING BRICK FACING

EXISTING MORTAR

INSTALL LAST LAYER AND TOOL TO A CONCAVE PROFILE DO NOT ALLOW MORTAR TO COME INTO CONTACT WITH OR RESIDUE TO REMAIN ON ANY EXPOSED BRICK SURFACES.

STEP 5

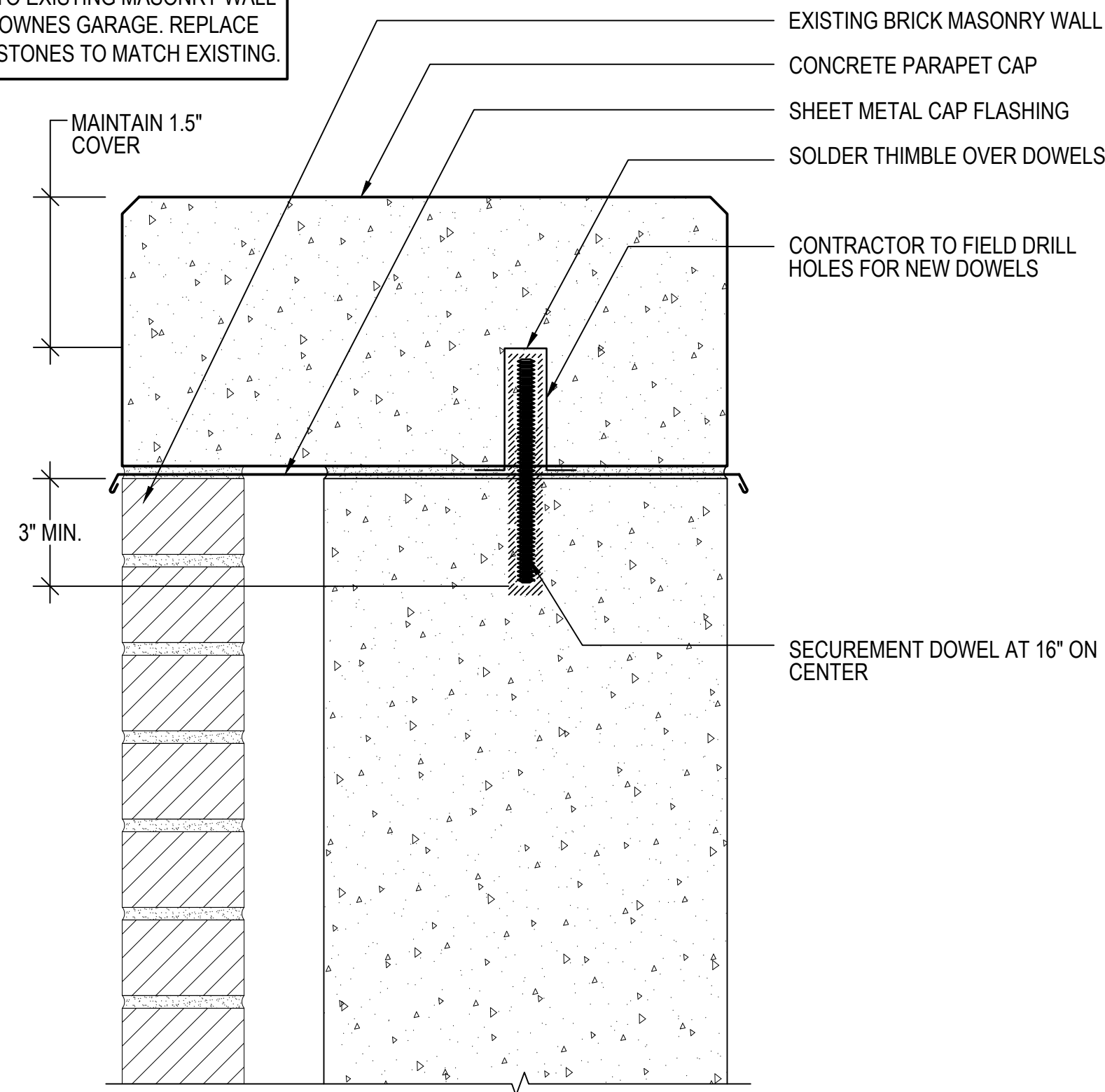
NOTE: REMOVE AND REPLACE EXISTING CONCRETE PARAPET CAPS TO MATCH EXISTING AT THE GEORGE A. AYOTTE GARAGE. INSTALL NEW CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL.



2 TYPICAL PARAPET CAP DETAIL - AYOTTE GARAGE

SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

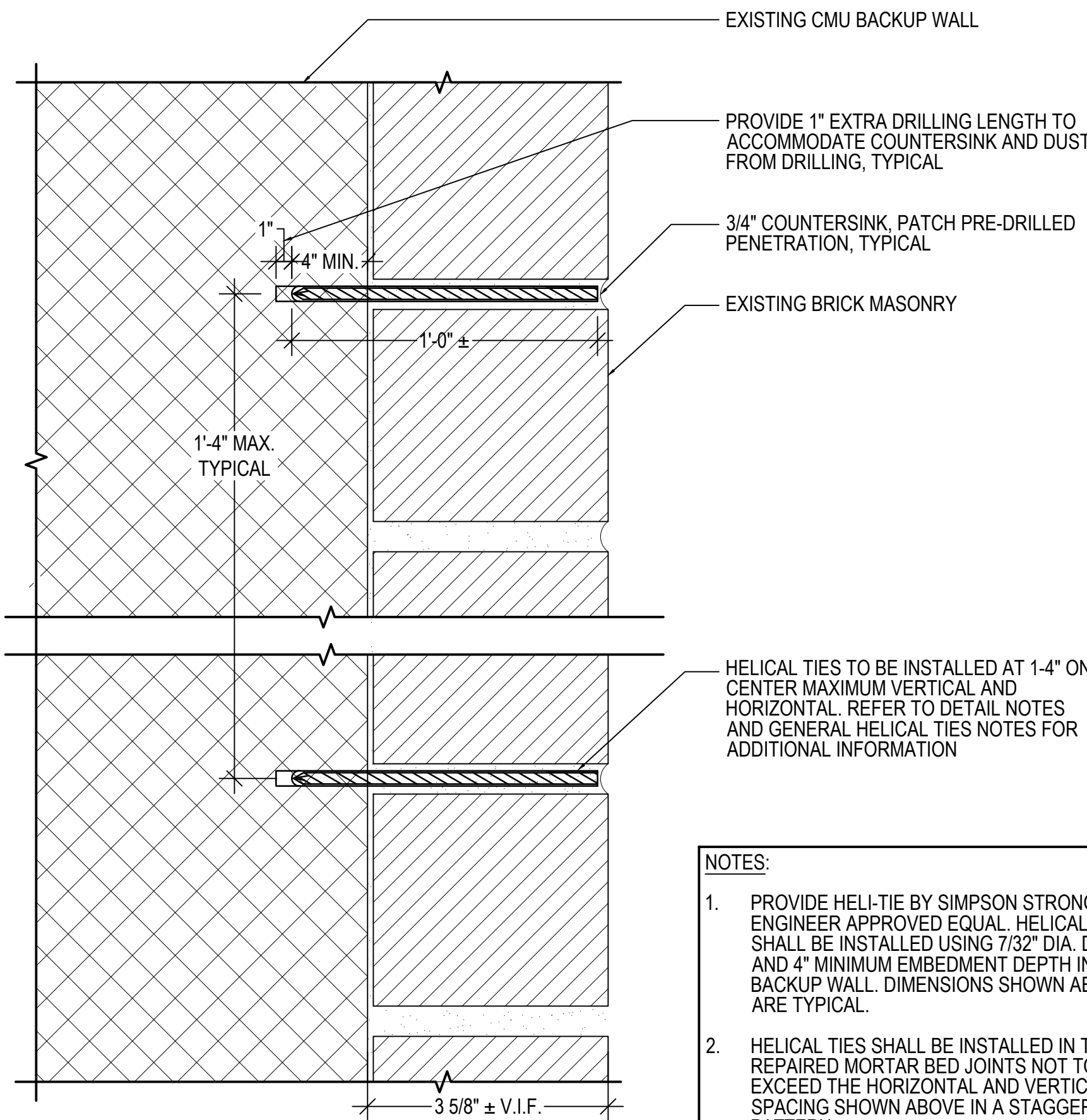
NOTE: REMOVE, TAG, STORE, AND REINSTALL EXISTING CONCRETE PARAPET CAPS WITH EPOXY COATED DOWELS INTO EXISTING MASONRY WALL AT THE JOSEPH M. DOWNES GARAGE. REPLACE DETERIORATED CAPSTONES TO MATCH EXISTING.



3 TYPICAL PARAPET CAP DETAIL - DOWNES GARAGE

SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

NOTE: ALL WORK ON THIS SHEET IS THE RESPONSIBILITY OF THE MASONRY SUBCONTRACTOR UNLESS OTHERWISE NOTED.

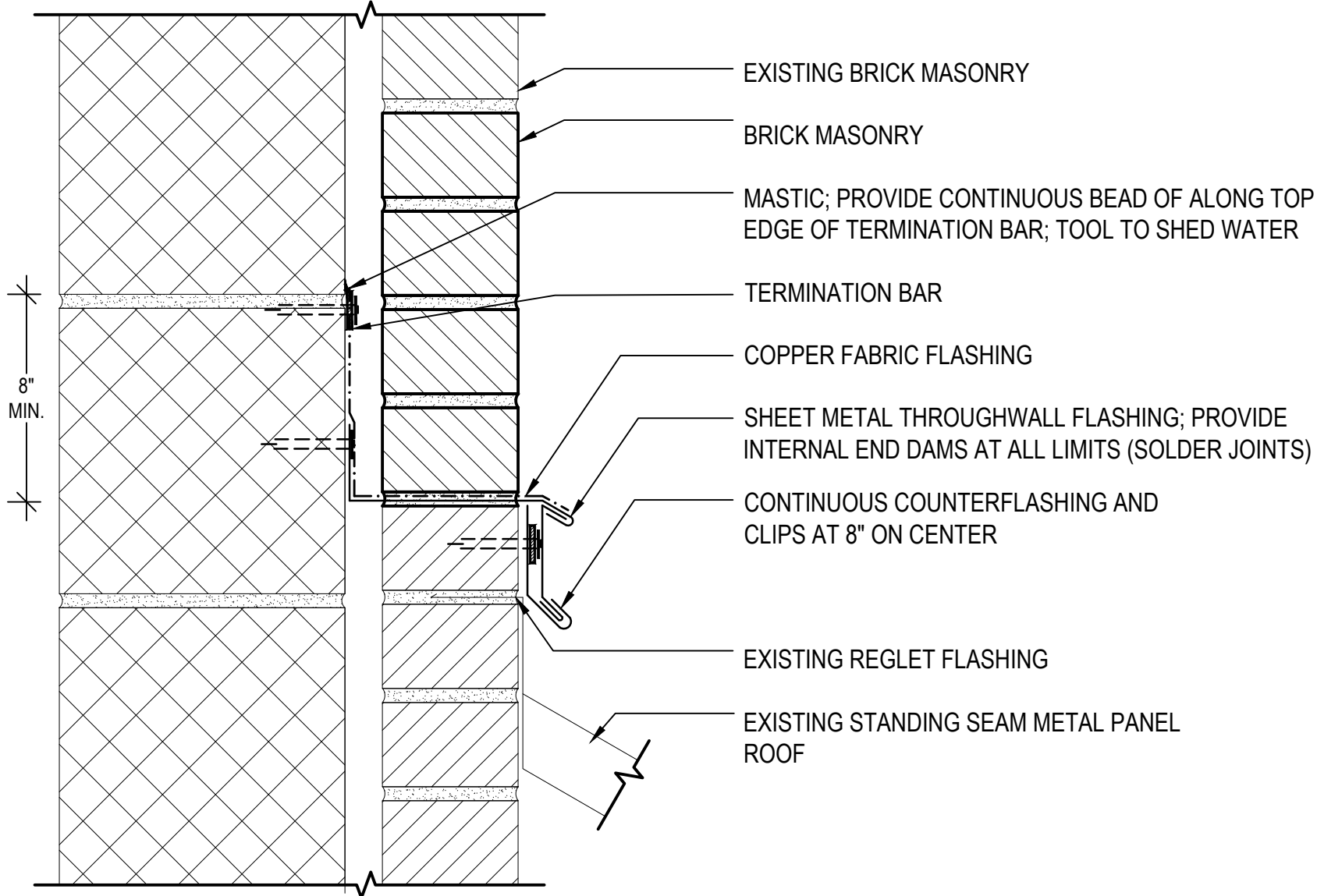


NOTES:

- PROVIDE HELI-TIE BY SIMPSON STRONG-TIE OR ENGINEER APPROVED EQUAL. HELICAL TIE SHALL BE INSTALLED USING 7/32" DIA. DRILL BIT AND 4" MINIMUM EMBEDMENT DEPTH INTO CMU BACKUP WALL. DIMENSIONS SHOWN ABOVE ARE TYPICAL.
- HELICAL TIES SHALL BE INSTALLED IN THE REPAIRED MORTAR BED JOINTS NOT TO EXCEED THE HORIZONTAL AND VERTICAL SPACING SHOWN ABOVE IN A STAGGERED PATTERN.

4 HELICAL TIE AT BRICK MASONRY DETAIL

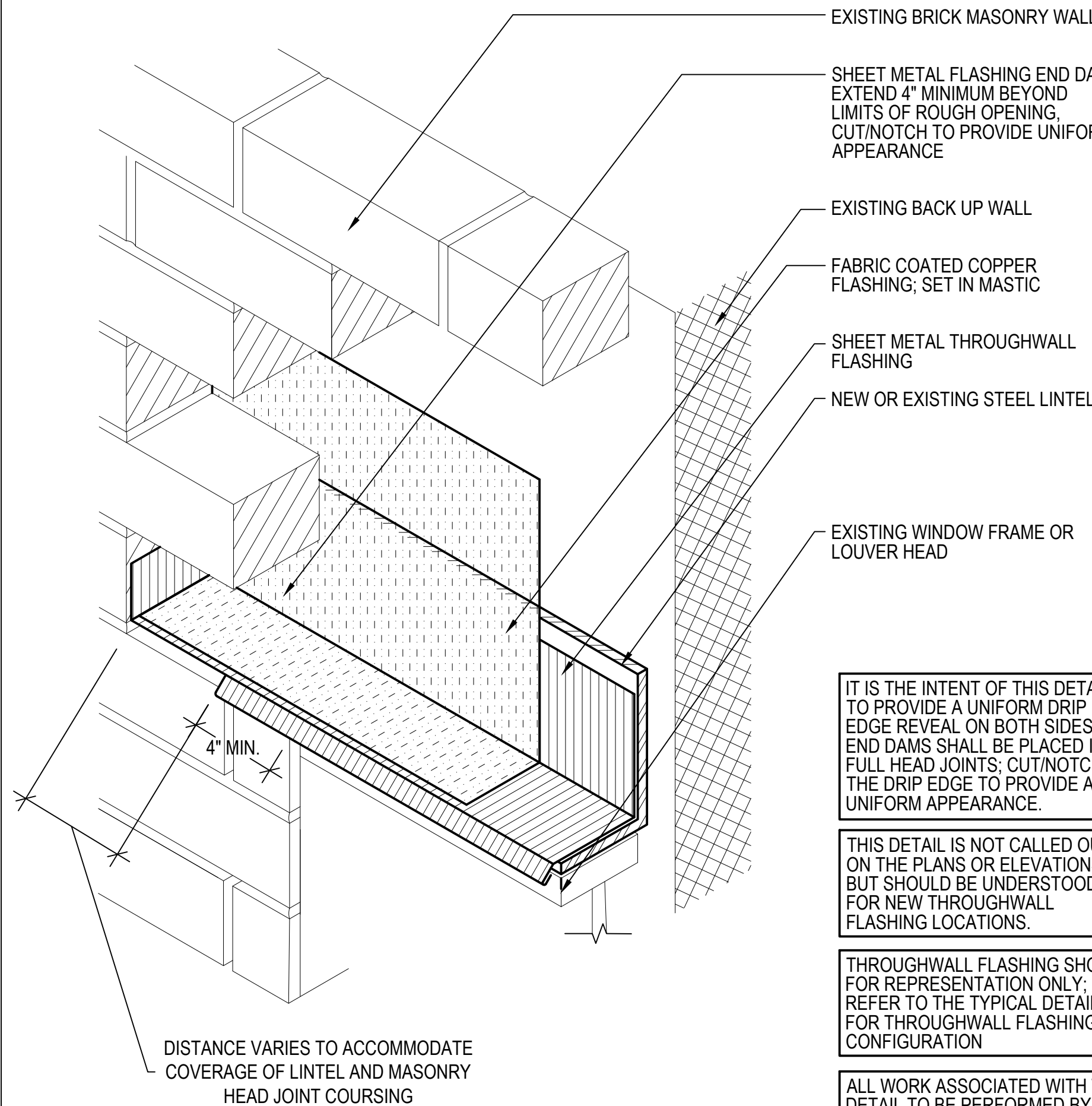
SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



NOTE: PROVIDE BLIND NAILERS AT LIMITS OF FLASHING, REFER TO DETAIL 10/A502. CONSTRUCT END DAMS AT ALL FLASHING LIMITS, REFER TO DETAIL 6/A701

5 BRICK MASONRY THROUGHWALL FLASHING

SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



IT IS THE INTENT OF THIS DETAIL TO PROVIDE A UNIFORM DRIP EDGE REVEAL ON BOTH SIDES. END DAMS SHALL BE PLACED IN FULL HEAD JOINTS. CUT/NOTCH THE DRIP EDGE TO PROVIDE A UNIFORM APPEARANCE.

THIS DETAIL IS NOT CALLED OUT ON THE PLANS OR ELEVATIONS BUT SHOULD BE UNDERSTOOD FOR NEW THROUGHWALL FLASHING LOCATIONS.

THROUGHWALL FLASHING SHOWN FOR REPRESENTATION ONLY. REFER TO THE TYPICAL DETAILS FOR THROUGHWALL FLASHING CONFIGURATION

ALL WORK ASSOCIATED WITH THIS DETAIL TO BE PERFORMED BY THE MASONRY CONTRACTOR, UNLESS DESIGNATED OTHERWISE

6 THROUGHWALL FLASHING END DAM

SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



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OWNER
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CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A700s		
DESIGNED BY	JVL		
DRAWN BY	JVL		
CHECKED BY	AE0/ACP		
DATE	2/22/2022		
DRAWING SCALE	AS NOTED		

GRAPHIC SCALE

SHEET TITLE

MASONRY
DETAILS

DRAWING NO.

A701

1

2

3

4

5

6

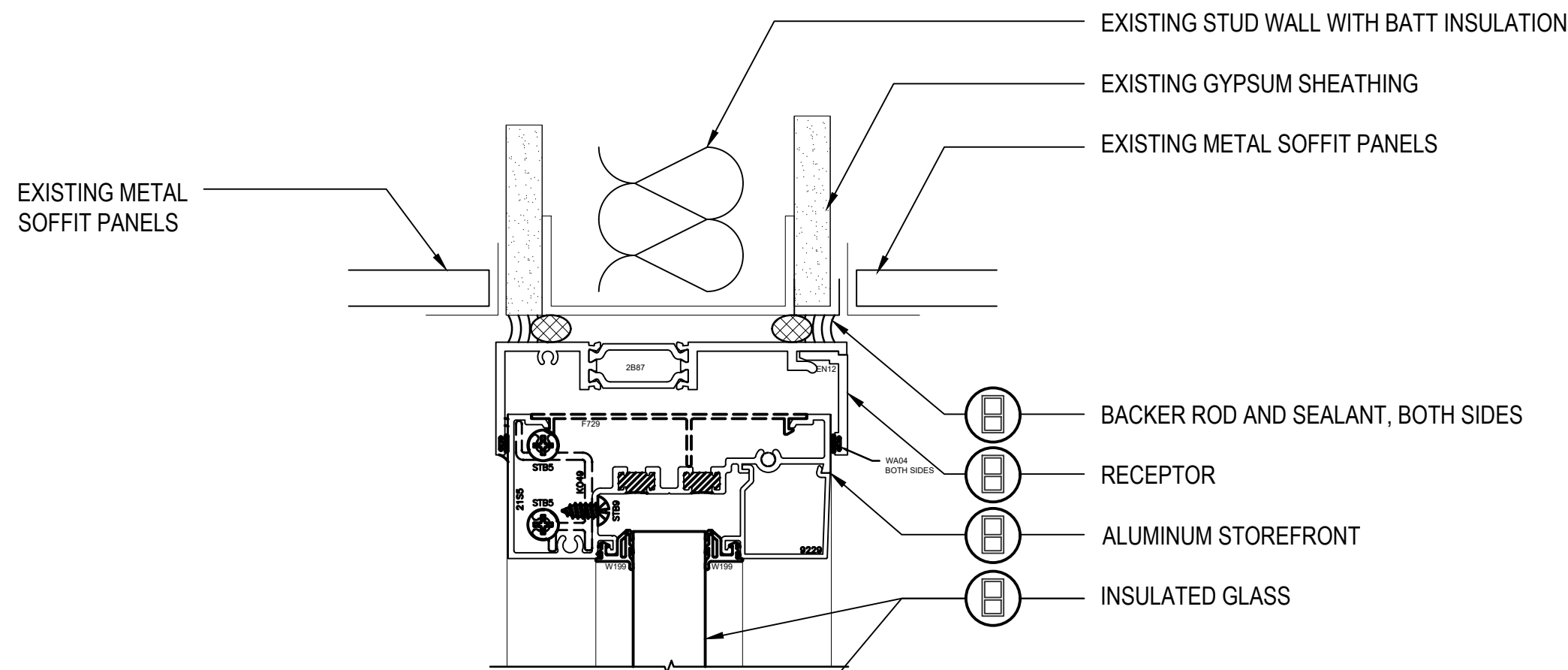
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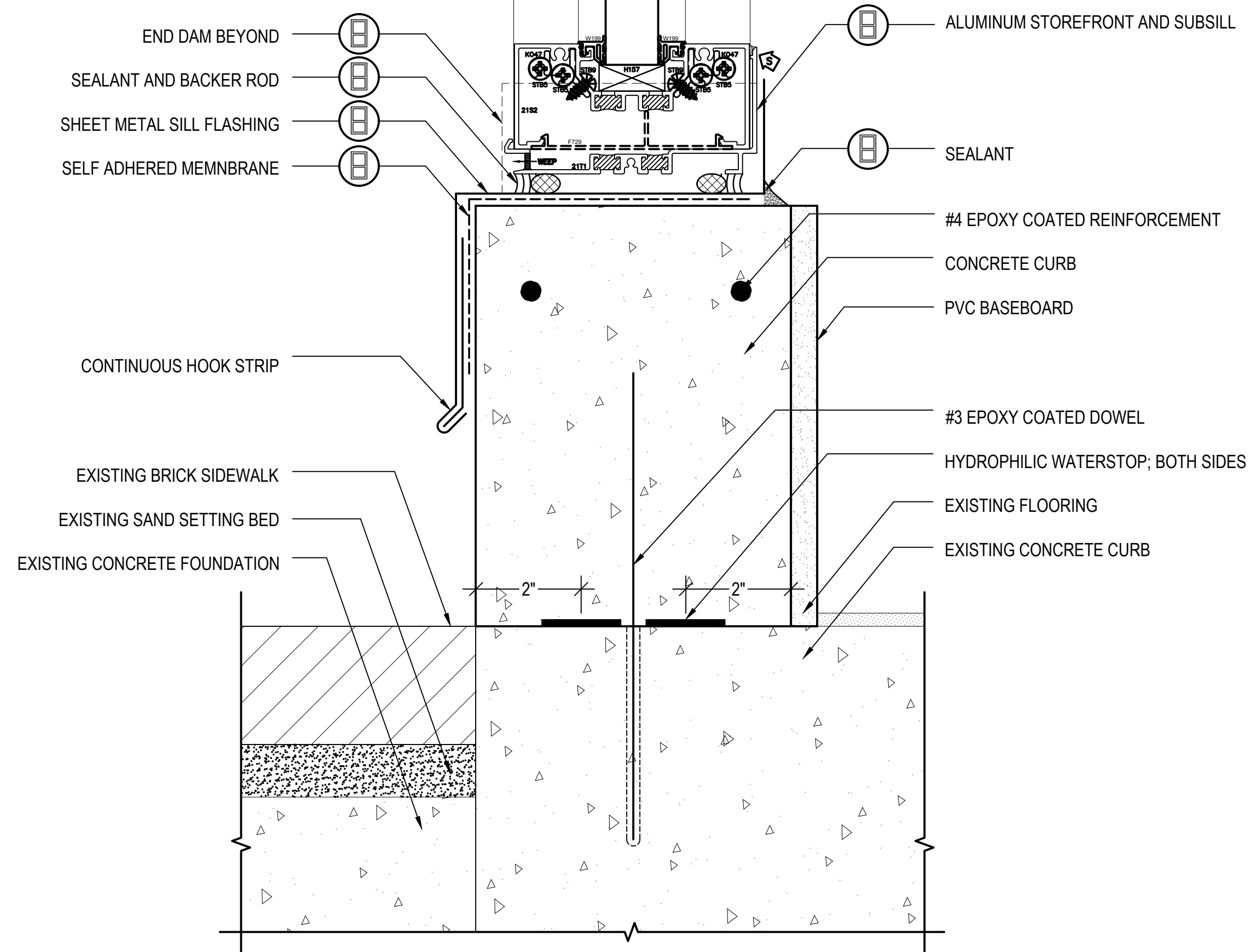
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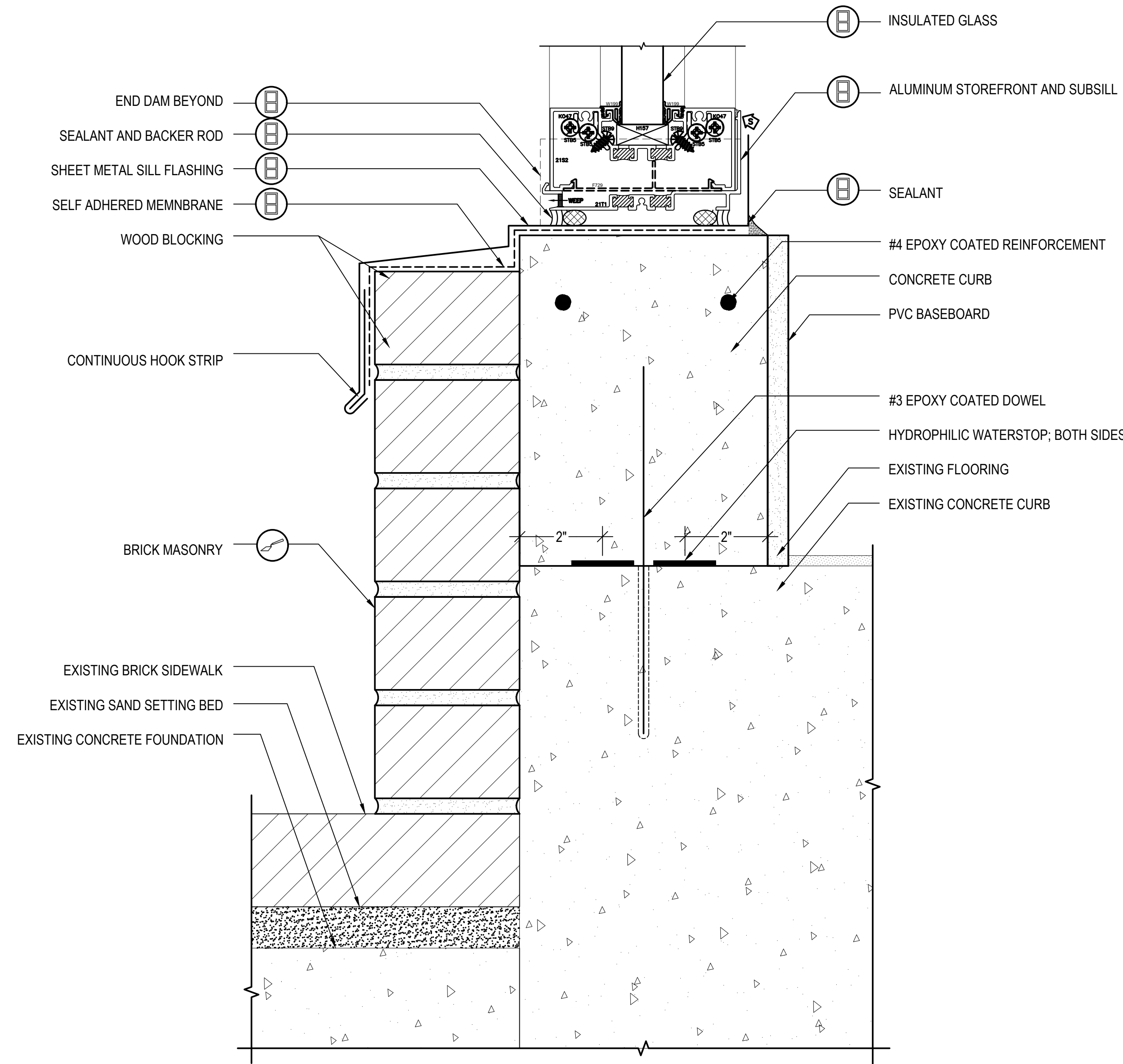
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1
A801
TYPICAL HEAD DETAIL
SCALE: 6"=1'-0" 0 1" 2" 3" 4"



2
A801
TYPICAL SILL DETAIL
SCALE: 6"=1'-0" 0 1" 2" 3" 4"



3
A801
TYPICAL SILL DETAIL
SCALE: 6"=1'-0" 0 1" 2" 3" 4"

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FACILITIES IN LOWELL, MA

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CITY OF LOWELL
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NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 A800s		
DESIGNED BY	JVL		
DRAWN BY	JVL		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	6"=1'-0"		

GRAPHIC SCALE

0 2' 4' 6'

SHEET TITLE

STOREFRONT
DETAILS

DRAWING NO.

A801

1

2

3

4

5

6

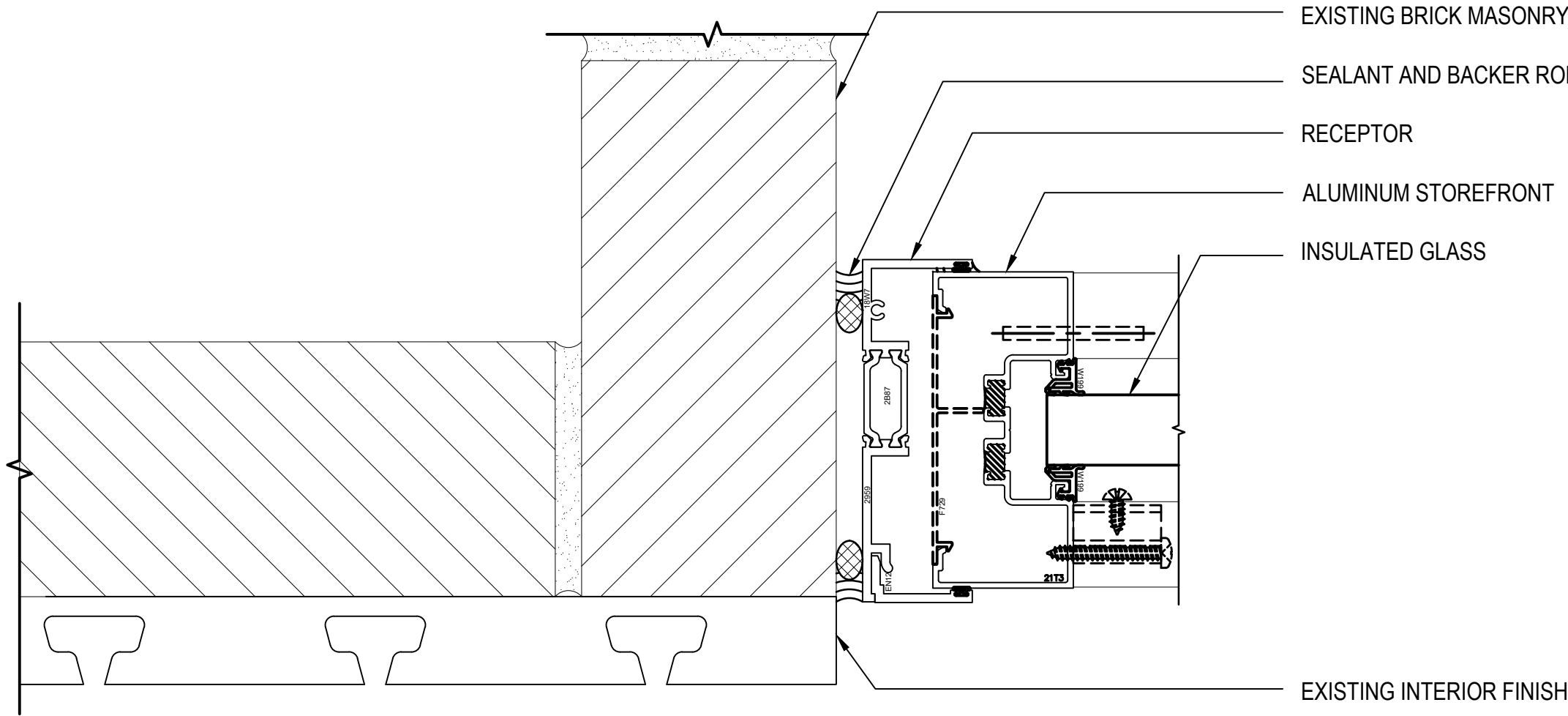
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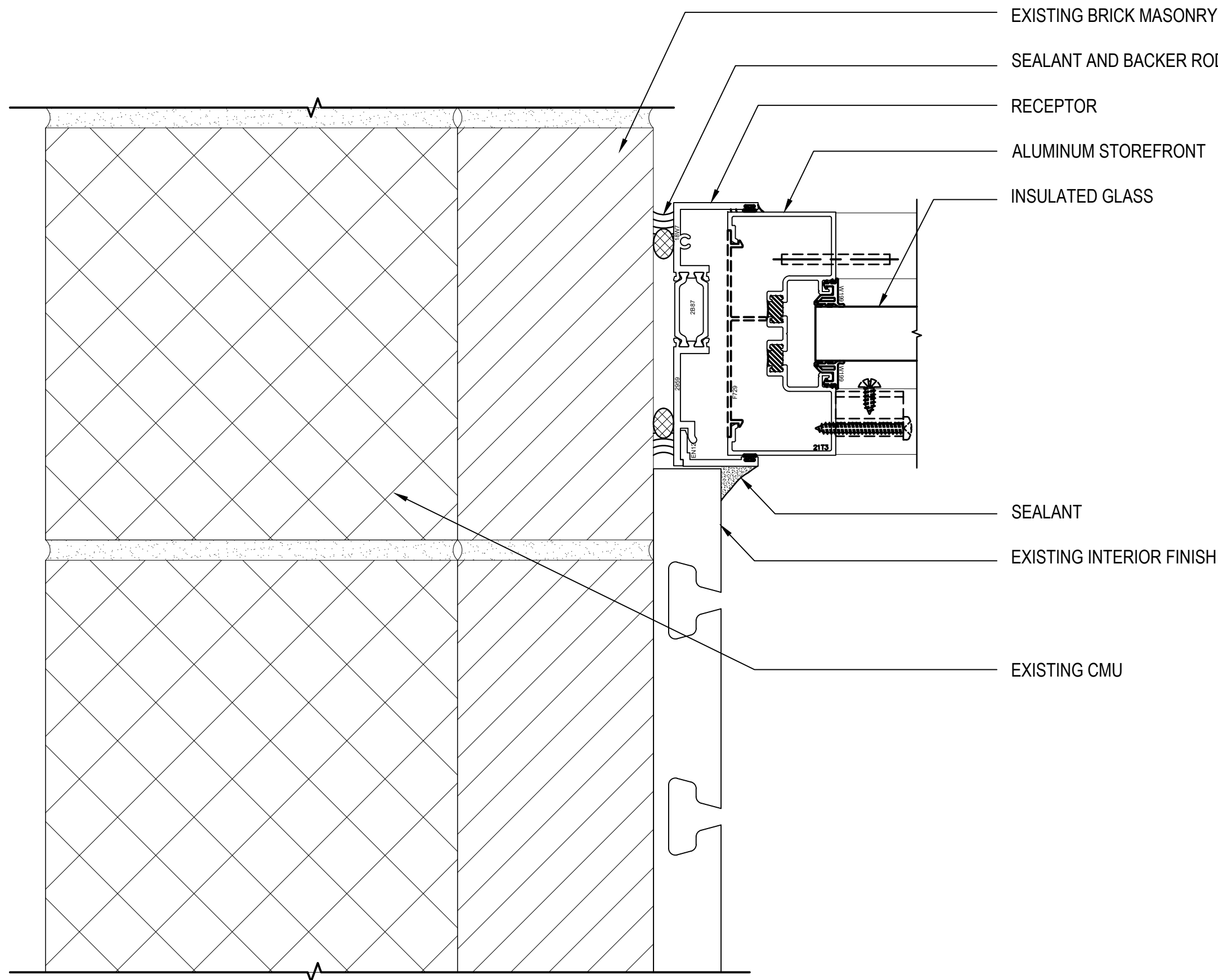
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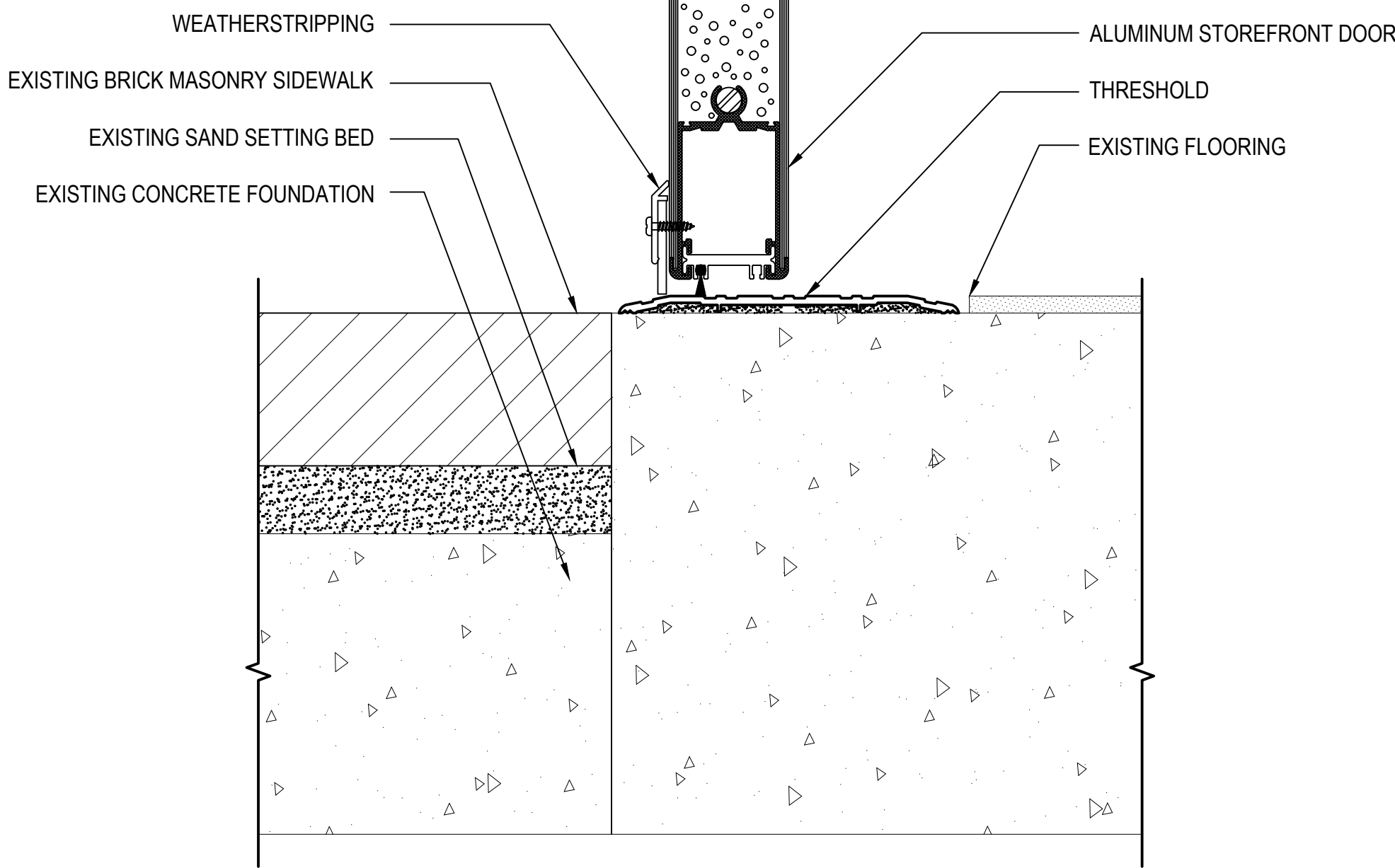
A



4
A802
JAMB DETAIL
SCALE: 6"=1'-0" 0 1" 2" 3" 4"



5
A802
JAMB DETAIL
SCALE: 6"=1'-0" 0 1" 2" 3" 4"



6
A802
THRESHOLD DETAIL
SCALE: 6"=1'-0" 0 1" 2" 3" 4"

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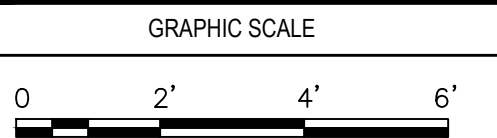
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DESIGNED BY	JVL		
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CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE	6"=1'-0"		



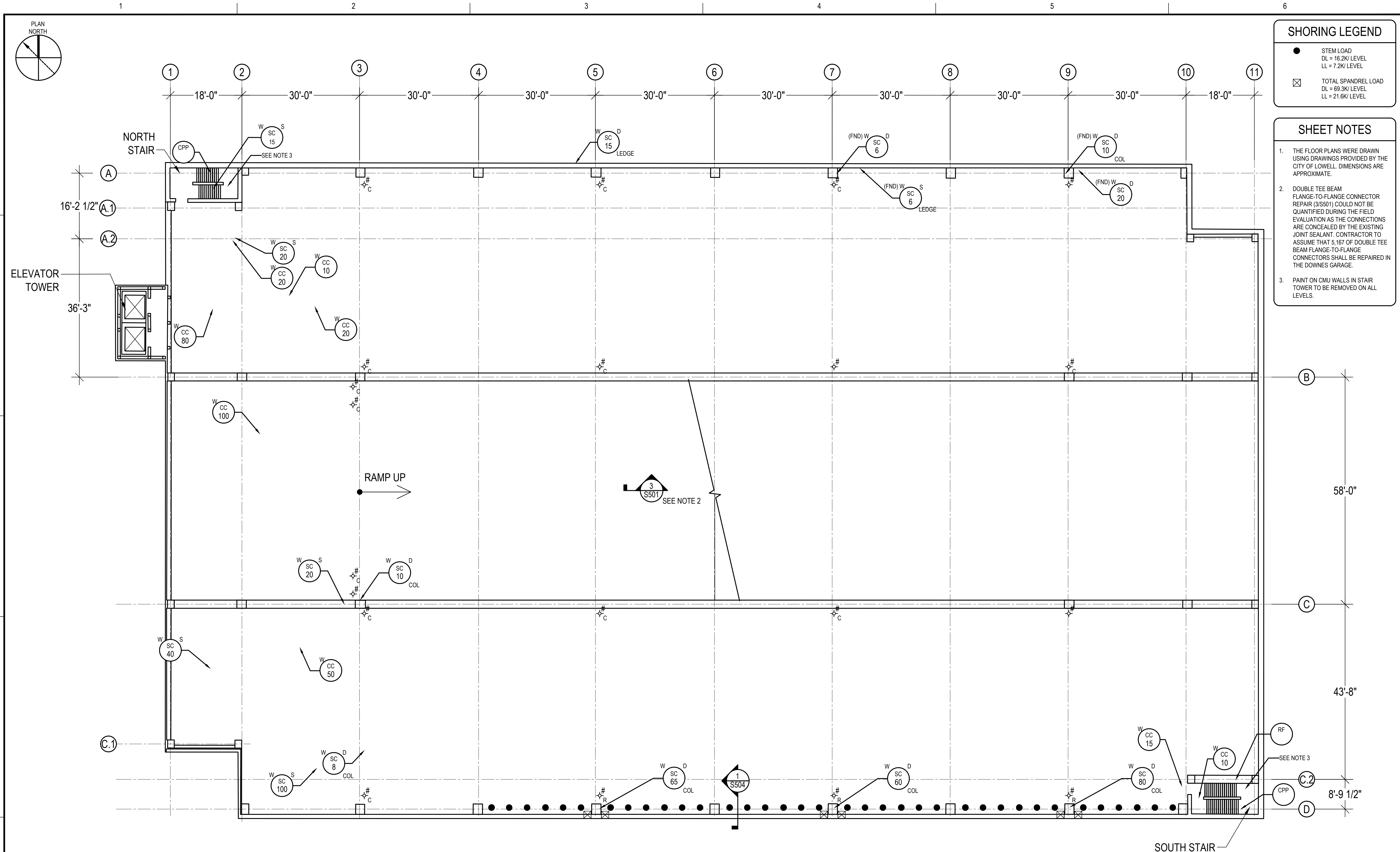
SHEET TITLE

STOREFRONT
DETAILS

DRAWING NO.

A802

	1	2	3	4	5	6
GENERAL NOTES:		CONCRETE REPAIR NOTES:		CONCRETE REPAIR NOTES (CONTINUED):		TEMPORARY SHORING NOTES:
1.	THE GENERAL AND SUBCONTRACTORS INSTALLING WORK DEFINED IN THE CONTRACT DOCUMENTS SHALL CONFORM TO THE CURRENT EDITION OF THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE (CMR 780), PROJECT SPECIFICATIONS, AND THIS DESIGN PACKAGE.	1.	ALL CONCRETE REPAIRS SHALL BE PERFORMED IN ACCORDANCE WITH THESE TECHNICAL NOTES AND REPAIR DETAILS AS WELL AS MANUFACTURER'S SPECIFIC REQUIREMENTS FOR THE SPECIFIED PRODUCTS.	15.	THE FOLLOWING MATERIALS SHALL BE USED FOR THE CONCRETE REPAIRS:	
2.	FOR THE SAKE OF CLARITY, EACH INDIVIDUAL DETAIL ON THE PARKING LEVEL FLOOR PLANS HAS NOT BEEN INDICATED. INSTALLATION DETAILS HAVE BEEN INDICATED FOR TYPICAL COMPONENTS AT RANDOM LOCATIONS.	2.	DO NOT FEATHER EDGE ANY REPAIRS. THE MIN. REPAIR MORTAR APPLICATION THICKNESS IS PREFERRED TO BE 1", HOWEVER, NEVER LESS THAN ½" THICK AT PERIMETERS.	A.	CONCRETE FORM AND POUR REPAIR MORTAR: SIKACRETE 211 FOR FULL DEPTH SPALLS; SIKAGUICK 1000 FOR PARTIAL DEPTH SPALLS, AS MANUFACTURED BY SIKA CORPORATION, OR ENGINEER APPROVED EQUAL. READY-MIX CONCRETE MAY BE USED AT FULL-DEPTH AND TRENCH DRAIN REPLACEMENT IF APPROVED BY THE ENGINEER.	
3.	HATCH PATTERNS ARE FOR REPRESENTATION ONLY AND SHOULD NOT BE USED A MEANS FOR QUANTIFYING.	3.	ALL LOOSE, DETERIORATED, PUNKY, SOFT, CARBONATED, DELAMINATING, SEGREGATED, CRACKED AND OTHER DEFICIENT CONCRETE MUST BE FULLY REMOVED DOWN TO SOLID CONCRETE SUBSTRATE. NOTIFY ENGINEER IF FULL DEPTH REPLACEMENT IS REQUIRED OR IF CRACKS ARE OBSERVED BEHIND THE SPALL AFTER THE DETERIORATED CONCRETE IS REMOVED.	B.	SUPPLEMENTAL REINFORCING: ASTM 615, GRADE 60 DEFORMED BARS SIZED AS DETERMINED BY GALE BASED ON EXISTING CONDITIONS.	
4.	DISCREPANCIES NOTED BY THE CONTRACTOR IN THE DRAWINGS OR SPECIFICATIONS MUST BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO BID SUBMISSION.	4.	PERIMETERS OF ALL SPALL REPAIRS MUST BE SAW-CUT TO A "NORMAL" STRAIGHT EDGE IN A POLYGON SHAPE. IN NO CASE REINFORCING STEEL OR OTHER EMBEDDED ITEMS BE CUT OR DAMAGED. THE CONTRACTOR MUST PROVIDE GROUND PENETRATING RADAR OR OTHER MEANS OF ELECTRONIC SCANNING TO LOCATE AND MARK EMBEDDED STEEL TO AVOID CUTTING. DAMAGE TO ANY STEEL REINFORCING OR OTHER EMBEDDED ITEMS DUE TO CUTTING/ REMOVAL OF THE DETERIORATED CONCRETE SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR MUST PROVIDE ELECTRIC CURRENT SCANNING TO LOCATE AND MARK EMBEDDED CONDUIT.	C.	REBAR COATING (CORROSION INHIBITOR): SIKA ARMATEC 110 EPOCEM AS MANUFACTURED BY SIKA CORPORATION, OR ENGINEER APPROVED EQUAL.	
5.	ALL ITEMS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS APPLICABLE TO THE PROJECT.	5.	ALL SPALL REPAIR AREA SUBSTRATES MUST BE THOROUGHLY EXAMINED AFTER COMPLETING THE FINAL SURFACE PREPARATION, TO VERIFY THAT NO ADDITIONAL SUBSTRATE CRACKING OR OTHER STRUCTURAL CONDITIONS EXIST. NOTIFY GALE IF ANY CRACKS OR OTHER DETERIORATED CONDITIONS ARE IDENTIFIED.	D.	STRUCTURAL ADHESIVE: SIKADUR 32 HI-MOD AS MANUFACTURED BY SIKA CORPORATION, OR ENGINEER APPROVED EQUAL.	
6.	THE CONTRACTOR SHALL REPORT DETERIORATED OR UNSUITABLE STRUCTURAL CONCRETE OR SUBSTRATES TO THE OWNER AND ENGINEER IN WRITING PRIOR TO PERFORMING OR CONTINUING WITH THE WORK.	6.	SPALL REPAIR SURFACE PROFILE MUST ACHIEVE AN ICRI-CSP 8 OR 9. WHERE ACCESS IS LIMITED OR DIFFICULT DUE TO PIPING OR OTHER OBSTRUCTIONS, THEN AN ICRI-CSP 7 SURFACE PROFILE MAY BE CONSIDERED AS APPROVED BY THE ENGINEER.	16.	THE CONTRACTOR SHALL HIRE AND COORDINATE THE SERVICES OF THE MANUFACTURER'S TECHNICAL FIELD REPRESENTATIVE TO VISIT THE SITE A MINIMUM OF ONE (1) TIME PER WEEK DURING THE CONSTRUCTION PERIOD. MANUFACTURER'S SITE VISITS ARE REQUIRED FOR THE CRACK AND CONCRETE REPAIR MORTAR APPLICATION. THE MANUFACTURER'S REPRESENTATIVE SHALL REVIEW MATERIAL STORAGE, MIXING, INSTALLATION, CURING, ETC. AND SUBMIT A WRITTEN FIELD REPORT INDICATING OBSERVATIONS AND RECOMMENDATIONS FOR EACH SITE VISIT.	
7.	THE CONTRACTOR IS RESPONSIBLE FOR SEGREGATING WORK AREAS FROM THE GENERAL PUBLIC USING SIGNS, CONES, CAUTION TAPE, ETC. THE CONTRACTOR SHALL CONTAIN ALL DUST AND DEBRIS DURING ALL PHASES OF THE WORK.	7.	RUSTED REINFORCING STEEL BARS MUST BE FULLY CLEANED TO BRIGHT, SHINY STEEL TO CONFORM TO SSPC SP11 REQUIREMENTS. WHERE REINFORCING STEEL IS SHOWING SECTION LOSS OF ¾" OR 25% OR MORE SECTION LOSS, SUPPLEMENTAL REINFORCING STEEL MUST BE PLACED TO ACHIEVE A MINIMUM OF 40 BAR DIAMETER LENGTH LAPS, AND TIED DIRECTLY ADJACENT TO SOLID BAR SECTIONS THAT DO NOT HAVE SECTION LOSS. ADDITIONAL CONCRETE REMOVAL AND DRILLING WILL BE REQUIRED TO PLACE THE NEW REINFORCING STEEL.	TRAFFIC COATING NOTES:		
8.	UPON COMPLETION OF THE WORK AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT AN ALL-INCLUSIVE LABOR AND MATERIALS GUARANTEE OF THE WORK TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP. THIS GUARANTEE SHALL BE FOR A PERIOD OF TWO (2) YEARS AND SHALL BE SIGNED BY A PRINCIPAL OF THE CONTRACTOR'S FIRM AND SEALED IF A CORPORATION.	8.	REMOVE ADDITIONAL CONCRETE BEHIND AND AROUND ALL REINFORCING STEEL BARS WHICH ARE CORRODED SO THAT PROPER AND THOROUGH CLEANING MAY BE ACHIEVED AROUND THE ENTIRE BAR. A MINIMUM OF 1" CLEAR, UNOBSTRUCTED SPACE AROUND EACH REINFORCING STEEL BAR MUST BE ACHIEVED ALONG THE FULL LENGTH OF THE BAR IN THE AREA OF THE SPALL REPAIR. CLEAN BARS TO ACHIEVE SSPC-SP11 COMPLIANCE. BARS MUST BE FULLY UNCOVERED TO COMPLY WITH THAT NOTED HEREIN, IF ANY PORTION OF THE REBAR IS EXPOSED AND IT IS RUSTED.	1.	EXISTING COATING SHALL BE REMOVED TO BARE CONCRETE BY HIGH PRESSURE WATERBLASTING (HYDRO-DEMOLITION) OR ENGINEER'S APPROVED EQUIVALENT METHOD. ALL EXISTING WATERPROOFING, DEBRIS, LOOSE CONCRETE, ETC. SHALL BE REMOVED TO PROVIDE AN OPEN CAPILLARY CONCRETE SURFACE FOR APPLICATION OF THE NEW COATING SYSTEM, AND MINIMUM SURFACE PROFILE TO COMPLY WITH ICRI-CSP 5.	
9.	THE CONTRACTOR'S BASE BID FOR THIS PROJECT MUST INCLUDE ALL LABOR, MOBILIZATION, PERMITTING, MATERIALS, TEMPORARY PROTECTION, ETC. NO ADDITIONAL COSTS WILL BE SUBMITTED TO THE OWNER OR ENGINEER IN ORDER TO COMPLETE THE INTENT OF THE WORK AS INDICATED ON THE DESIGN DRAWINGS.	9.	IN ALL CASES, THE EXISTING AND NEW REINFORCING STEEL MUST HAVE A MINIMUM CONCRETE/REPAIR MORTAR COVER OF 1 ½". NOTIFY THE ENGINEER IF MODIFICATION OF STEEL PLACEMENT OR CONCRETE THICKNESS IS REQUIRED TO ACHIEVE THIS REQUIREMENT.	2.	THE TRAFFIC COATING SYSTEM MUST BE KELMAR T.E. EXPOSURE FOUR (4) WATERPROOFING SYSTEM BY TECHNICAL BARRIER SYSTEMS, INC. EXPOSURE FOUR (4) ALTERNATING WEAR COAT AND AGGREGATE BROADCAST. TOTAL SYSTEM THICKNESS SHALL BE ¾" TO 1" MINIMUM.	
10.	THE CONTRACTOR PERSONNEL PRESENT AT THE SITE DURING ALL PHASES OF THE WORK MUST BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE WORK. THE CONTRACTOR'S WORKERS SHALL NOT BE CHANGED OR ROTATED DURING THE DURATION OF THIS PROJECT UNLESS SPECIFICALLY TRAINED FOR THIS PARTICULAR RENOVATION PROJECT AND APPLICATION - NO EXCEPTIONS.	10.	WITH LARGE OR DEEPER SPALL REPAIR AREAS, WITH DEPTHS EXCEEDING 3 INCHES, IF NO EXISTING REBAR IS PRESENT, OR REBAR GRID (INNER AND OUTER GRIDS) IS SEPARATED BY MORE THAN 6 INCHES, THEN THE SUBSTRATE OF THE REPAIR MUST BE PINNED WITH STAINLESS STEEL, 8 MM HELICAL TIES; OR STAINLESS STEEL FULLY THREADED CAP SCREWS WITH HEX HEADS PROJECTING OUTWARD BY 2 INCHES INTO THE MEDIUM OF THE REPAIR. DRILL HOLES FOR THREADED BOLTS (CAP SCREWS) TO 1/8" TO 1/4" LARGER THAN THE BOLT DIAMETER. BOLT DIAMETERS SHALL BE 3/16" TO 1/2", AND SHALL BE EMBEDDED 2 INCHES INTO SOLID CONCRETE. USE SPECIFIED STRUCTURAL ADHESIVE TO PLACE THREADED ROD PINS. HELICAL ANCHOR PINS, IF USED, MUST BE DRIVEN USING THE MANUFACTURER REQUIRED DRIVING TOOL AND BIT. PLACE PINS A MAXIMUM OF 8 INCHES ON CENTER, AND TIE 2" X 2" X 14 GAGE HOT-DIP GALVANIZED OR STAINLESS STEEL MESH FROM PIN-TO-PIN. PLACE THE MESH 2" FROM THE BELLY OF THE PREPARED SPALL AREA, WHILE ALWAYS MAINTAINING A MINIMUM 1 ½" OF CONCRETE/REPAIR MORTAR COVER AT THE OUTSIDE SURFACE OF THE REPAIR.	3.	THE EXISTING WATERPROOFING SYSTEM SHALL BE FULLY REMOVED VIA PARTIAL DEPTH HYDRO-DEMOLITION OR ENGINEER APPROVED MECHANICAL ABRASION EQUIVALENT, DOWN TO BARE CONCRETE. THE CONCRETE DECK SHALL BE CLEANED AND PREPPED TO AN OPEN CAPILLARY CONDITION WITH ALL DIRT, DEBRIS, AND OILS REMOVED. AT CONTRACTOR'S OPTION (AND ONLY IF APPROVED BY ENGINEER), THE EXISTING WATERPROOFING MAY BE REMOVED VIA MECHANICAL MEANS AND THE CONCRETE DECK PREPARED VIA SHOT-BLASTING.	
11.	THE CONTRACTOR IS TO COORDINATE ON-SITE USE OF WATER & ELECTRICITY WITH THE OWNER.	11.	WHEN DRILLING INTO SOLID CONCRETE TO PLACE NEW SUPPLEMENTAL STEEL REINFORCING BARS, DRILL THE HOLES 1/4" LARGER THAN THE BAR DIAMETER. FULLY VACUUM, BLOW OUT (WITH OIL FREE COMPRESSED AIR) AND BRISTLE BRUSH OUT THE HOLES TO REMOVE ALL DUST, DEBRIS, LAITANCE, ETC. THE DEPTH OF THE HOLES MUST BE DETERMINED BY GALE BASED UPON BAR SIZE, LOCATION, AND NEED FOR DEVELOPMENT. THIS WILL BE DETERMINED ON A CASE BY CASE BASIS. IN NO CASE SHALL THE DRILLED HOLES BE LESS THAN THAT NOTED ON THE DESIGN DRAWINGS UNLESS APPROVED BY THE ENGINEER. IN NO CASE SHALL SUPPLEMENTAL BARS BE LESS THAN #4 BARS, UNLESS OTHERWISE APPROVED BY THE ENGINEER. IN MANY CASES, NEW REINFORCING STEEL BARS MAY BE #5 OR LARGER, DEPENDING UPON THE EXTENT OF REINFORCEMENT CORROSION AND NEED FOR SUPPLEMENTAL STEEL. BARS EMBEDDED INTO CLEANED DRILLED HOLES MUST BE FULLY ADHERED IN PLACE USING SIKADUR 31 HI-MOD AS MANUFACTURED BY SIKA CORPORATION, OR ENGINEER APPROVED EQUAL.	4.	A STRETCH COAT OF NEO V II C MEMBRANE SHALL BE INSTALLED OVER ALL CRACKS PRIOR TO INSTALLING MEMBRANE OVER THE ENTIRE AREA. THE STRETCH COAT SHALL BE MINIMUM 4" WIDE OVER ALL CRACKS. CRACKS AND CONTROL JOINTS GREATER THAN 1/8" WIDE SHALL BE ROUTED AND SEALED WITH SEALANT PRIOR TO INSTALLING STRETCH COAT.	
12.	WATERPROOFING AND CONCRETE REPAIR MATERIAL MANUFACTURER'S TECHNICAL REPRESENTATIVE AND SUBCONTRACTORS MUST BE PRESENT AT THE PROJECT PRECONSTRUCTION MEETING AND MUST INCLUDE PERIODIC SITE VISITS WITH FORMAL REPORTING AS SPECIFIED.	12.	JUST PRIOR TO PLACING THE REPAIR MORTAR AND FORMWORK, THE ENTIRE SUBSTRATE OF THE SPALL REPAIR MUST BE THOROUGHLY CLEANED OF ALL BOND INHIBITING MATERIALS, BROUGHT TO SATURATED SURFACE DRY (SSD) CONDITION WITH POTABLE WATER, RECEIVE THE BONDING AGENT OR BRISTLE BRUSH APPLIED BONDING SLURRY (ALL AS REQUIRED BY THE MATERIAL MANUFACTURER), AND CLEANED REBAR COATED WITH SPECIFIED COATING. APPLY TWO (2) COATS OF THE SPECIFIED REBAR COATING ON CLEANED EXISTING STEEL WITHOUT SPILLING THE MATERIAL ON ANY OTHER SURFACES OR COMPONENTS. DO NOT ALLOW THE COATING TO DRY BETWEEN COATS, NOT DRY PRIOR TO APPLYING THE REPAIR MORTAR. ALL MATERIALS MUST BE APPLIED IN A "WET-ON-WET" CONDITION FOR GREATER BOND.	5.	AT ALL CONTROL JOINTS AND CRACKS INDICATED TO RECEIVE SEALANT, THE STRETCH COAT SHALL BE INSTALLED AND KELFLEX TAPE SHALL BE EMBEDDED INTO THE NEWO V II C MEMBRANE.	
DEMOLITION NOTES:				6.	CONCRETE SURFACE PRIMER SHALL BE DUALOX EPOXY PRIMER BY TBS PRODUCTS OR APPROVED EQUAL. PRIMER SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.	
1.	NO DEMOLITION WORK SHALL PROCEED UNTIL A PLAN HAS BEEN SUBMITTED TO AND APPROVED BY THE OWNER AND ENGINEER DETAILING THE METHODS AND EQUIPMENT TO BE USED TO DEMOLISH AND/OR SURFACE PREPARE STRUCTURES AND FEATURES.			7.	INTERMEDIATE WATERPROOFING SHALL BE NEO V II C ELASTOMERIC WATERPROOFING MEMBRANE BY TBS PRODUCTS OR APPROVED EQUAL. WATERPROOFING MEMBRANE SHALL BE INSTALLED TO A 20 MIL DRY FILM THICKNESS (DFT).	
2.	ALL DEMOLISHED MATERIALS AND DEBRIS SHALL BE LEGALLY DISPOSED OF OFF SITE IN A MANNER SATISFACTORY TO THE OWNER AND CURRENT DEP/MEPA REQUIREMENTS.			8.	WEAR COATS SHALL BE KELMAR T.E. 100% EPOXY WEAR COURSE BY TBS PRODUCTS WITH SILICON CARBIDE AGGREGATE BROADCAST TO REFUSAL. SILICON CARBIDE AGGREGATE SHALL BE NO. 20 OR NO. 24. CONTRACTOR SHALL PROVIDE IN-PLACE MOCK-UPS UTILIZING EACH AGGREGATE SIZE FOR OWNER, ENGINEER AND MANUFACTURER'S REPRESENTATIVE REVIEW. WEAR COAT SHALL BE INSTALLED IN MULTIPLE LIFTS (THREE LIFTS MINIMUM) TO A TOTAL 69 MIL THICKNESS (W/O AGGREGATE). AGGREGATE SHALL BE BROADCAST TO REFUSAL IN EACH LIFT, ALLOWED TO CURE AND THE EXCESS SHALL BE BRUSHED OFF PRIOR TO INSTALLATION OF NEXT LIFT.	
PROTECTION OF EXISTING STRUCTURES:				9.	TOP COAT SHALL BE 1910 COATING AS MANUFACTURED BY TBS PRODUCTS.	
1.	EXISTING STRUCTURES, UTILITY LINES AND EMBEDDED UTILITIES MUST BE COORDINATED WITH AND IDENTIFIED BY THE OWNER AND CONTRACTOR, AND MARKED ON-SITE PRIOR TO INITIATING CONSTRUCTION. IN THE EVENT THAT ANY UNMARKED OR UNKNOWN STRUCTURE/UTILITY ARE UNCOVERED BY THE CONTRACTOR, WORK MUST HALT AND THE CONTRACTOR SHALL REPORT ITS FINDINGS TO THE OWNER'S SITE REPRESENTATIVE FOR INSTRUCTIONS BEFORE PROCEEDING FURTHER. THE EXISTING STRUCTURES AND UTILITIES WHICH ARE ADJACENT TO THE SITE AND THOSE TO REMAIN WITHIN THE LIMITS OF THE WORK SHALL BE PROTECTED AGAINST DAMAGE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO THE OWNER IN THE EVENT OF REMOVAL OF OR DAMAGE TO ANY EXISTING OBJECTS BY CONTRACTORS PERSONNEL, WHICH ARE INTENDED BY THE OWNER TO REMAIN IN PLACE.			10.	SEALANT FOR USE UNDER AND IN CONTACT WITH WATERPROOFING SHALL BE A SOLVENT-FREE, MOISTURE-TOLERANT, FLEXIBLE EPOXY CONTROL JOINT SEALER AND ADHESIVE, EITHER NON-SAGGING OR SELF-LEVELING AS REQUIRED SUCH AS SIKADUR 51 AS MANUFACTURED BY SIKA CORPORATION, INC. OR APPROVED EQUAL.	
QUALITY ASSURANCE:				TRAFFIC MARKING PAINT:		
1.	CONTRACTOR MUST COORDINATE AND PAY FOR ALL MATERIAL MANUFACTURER'S SITE VISITS TO REVIEW CONSTRUCTION. AT A MINIMUM, THE MANUFACTURER'S TECHNICAL REPRESENTATIVE SHALL BE ON SITE FOR THE FOLLOWING REVIEWS:			1.	PRIOR TO DEMOLITION, CONTRACTOR SHALL FIELD MEASURE ALL EXISTING PARKING STALLS, NO PARKING AREAS, ARROWS, ETC. AND PROVIDE OWNER AND ENGINEER WITH DIMENSIONED AS-BUILT LAYOUT OF ALL TRAFFIC MARKINGS. THE INTENT OF THE DESIGN IS TO REPLICATE THE EXISTING TRAFFIC MARKINGS.	
A.	PRE-CONSTRUCTION MEETING.			2.	TRAFFIC MARKING PAINT SHALL BE A PREMIUM QUALITY WATERBORNE ACRYLIC ALKYD TRAFFIC MARKING PAINT SUCH AS PRO-PARK B97 SERIES AS MANUFACTURED BY SHERWIN WILLIAMS OR APPROVED EQUAL. COLOR TO BE SELECTED BY OWNER.	
B.	CONCRETE PREPARATION PRIOR TO INSTALLATION OF MATERIALS.			3.	STENCILS SHALL BE USED TO PROVIDE STRAIGHT, CONSISTENT TRAFFIC MARKINGS.	
C.	REVIEW MATERIAL STORAGE, MIXING, SURFACE PREPARATION, APPLICATION, CURING AND TEMPORARY PROTECTION FOR EACH MATERIAL TYPE OR COMPONENT.			4.	TRAFFIC COATING SHALL BE ALLOWED TO CURE MINIMUM 24 HOURS AFTER TOP COAT HAS BEEN INSTALLED PRIOR TO APPLICATION OF TRAFFIC MARKING PAINT.	
D.	MINIMUM ONE (1) SITE VISITS PER WEEK DURING INSTALLATION. MOCK-UP OF EACH REPAIR TYPE WITH MANUFACTURER'S REPRESENTATIVE PRESENT.					
E.	PERIODIC TESTING OF MATERIAL THICKNESS TO CONFIRM CONFORMANCE TO MANUFACTURER'S WRITTEN TECHNICAL DATA AND THESE CONTRACT DOCUMENTS.					
2.	FOR EACH SITE VISIT, THE MANUFACTURER'S REPRESENTATIVE MUST PROVIDE A WRITTEN FIELD REPORT INDICATING AREAS REVIEWED, PROCEDURES USED, RECOMMENDATIONS MADE, INCORRECT INSTALLATIONS, CORRECTIVE ACTIONS AND PHOTOGRAPHIC DOCUMENTATION. THE WRITTEN FIELD REPORT MUST INCLUDE DATE, TIME, COMPLETE LIST OF PERSONNEL ON SITE, AREAS REVIEWED WITH SKETCH PLAN IDENTIFICATION; PLACED WITH PHOTO DOCUMENTS ON MANUFACTURER'S COMPANY LETTERHEAD.					
3.	THE CONTRACTOR SHALL OBTAIN AND PROVIDE COPIES OF ALL MATERIAL AND SYSTEM WARRANTIES TO THE OWNER.					



SHORING LEGEND

●

STEM LOAD
DL = 16.2K/LEVEL
LL = 7.2K/LEVEL

☒

TOTAL SPANDREL LOAD
DL = 69.3K/LEVEL
LL = 21.6K/LEVEL

SHEET NOTES

1.

THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.

2.

DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.

3.

PAIN ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

GALE

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PROJECT

OWNER

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEO/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

JOSEPH M. DOWNES GARAGE LOWER LEVEL PLAN

DRAWING NO.

S101

1 LOWER LEVEL PLAN

S101

SCALE: NOT TO SCALE

REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	
<div>CC #</div> CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>DMP S</div> DEFORMED METAL PANEL; S = SEVERE DEFORMATION TO BE REPLACED	
<div>DC #</div> DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	SEALANTS	
<div>SC #</div> SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.	
<div>#</div> DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED			

KEY PLAN

NOT TO SCALE

LEGEND:

GARAGE AREA SHOWN ON THIS PLAN

—

ROOF LEVEL

—

LEVEL 5

—

LEVEL 4

—

LEVEL 3

—

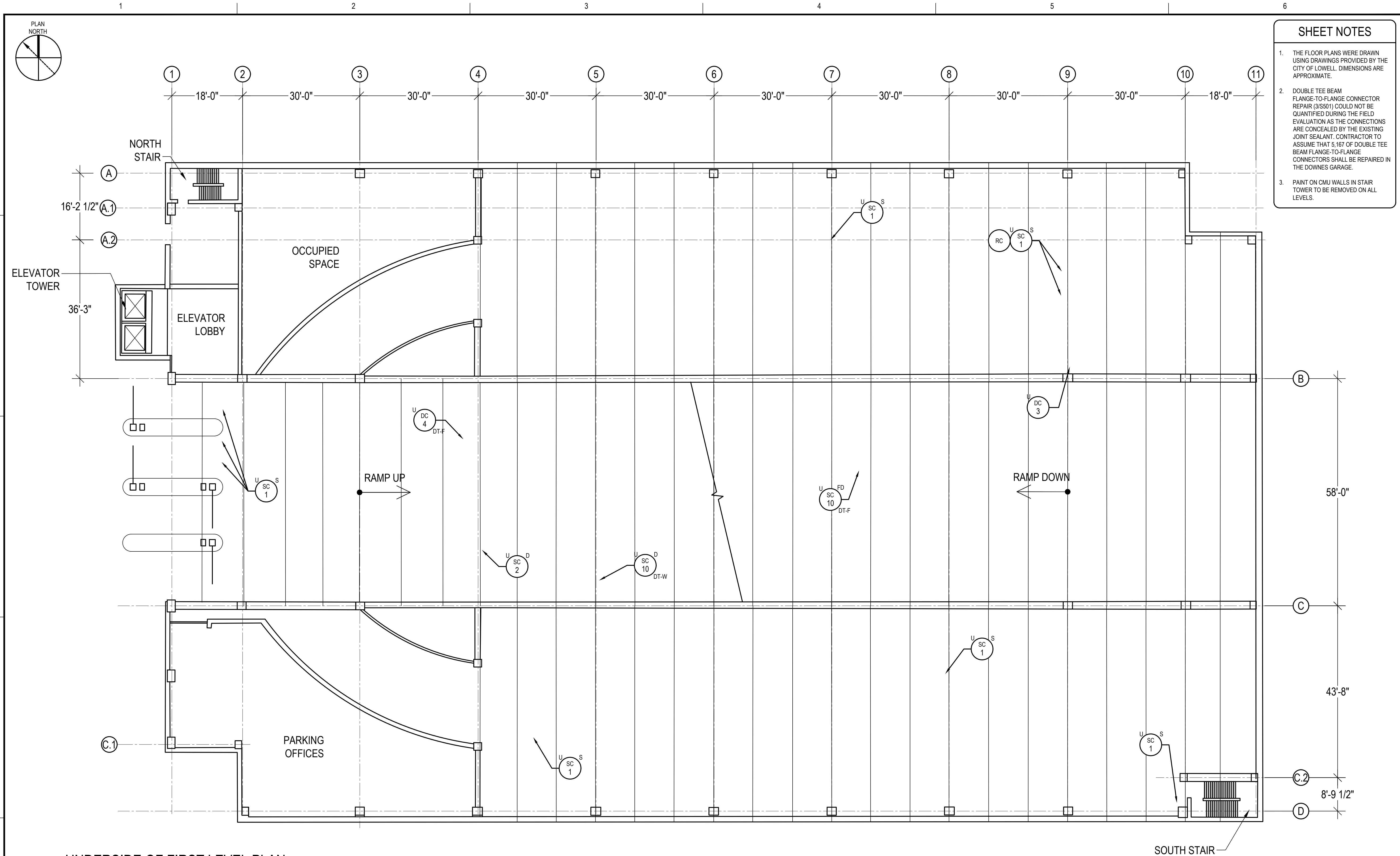
LEVEL 2

—

LEVEL 1

—

LOWER LEVEL



- SHEET NOTES
1.

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2.

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3.

PAIN ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

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DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEO/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

JOSPEH M. DOWNES GARAGE
UNDERSIDE OF
FIRST LEVEL
PLAN

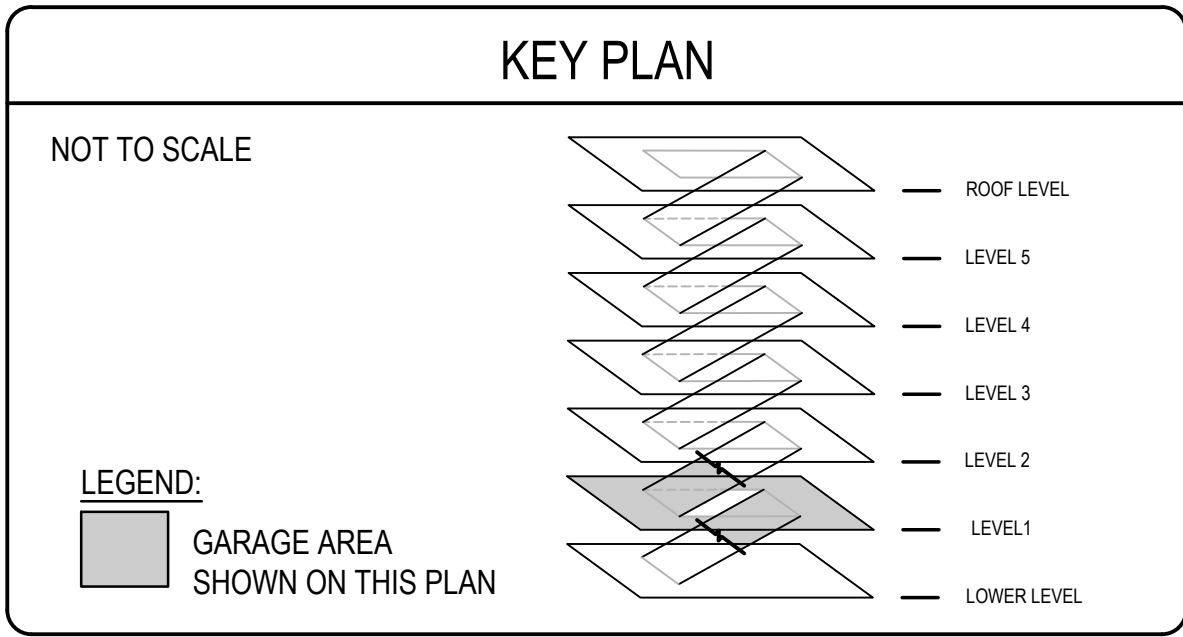
DRAWING NO.
S102

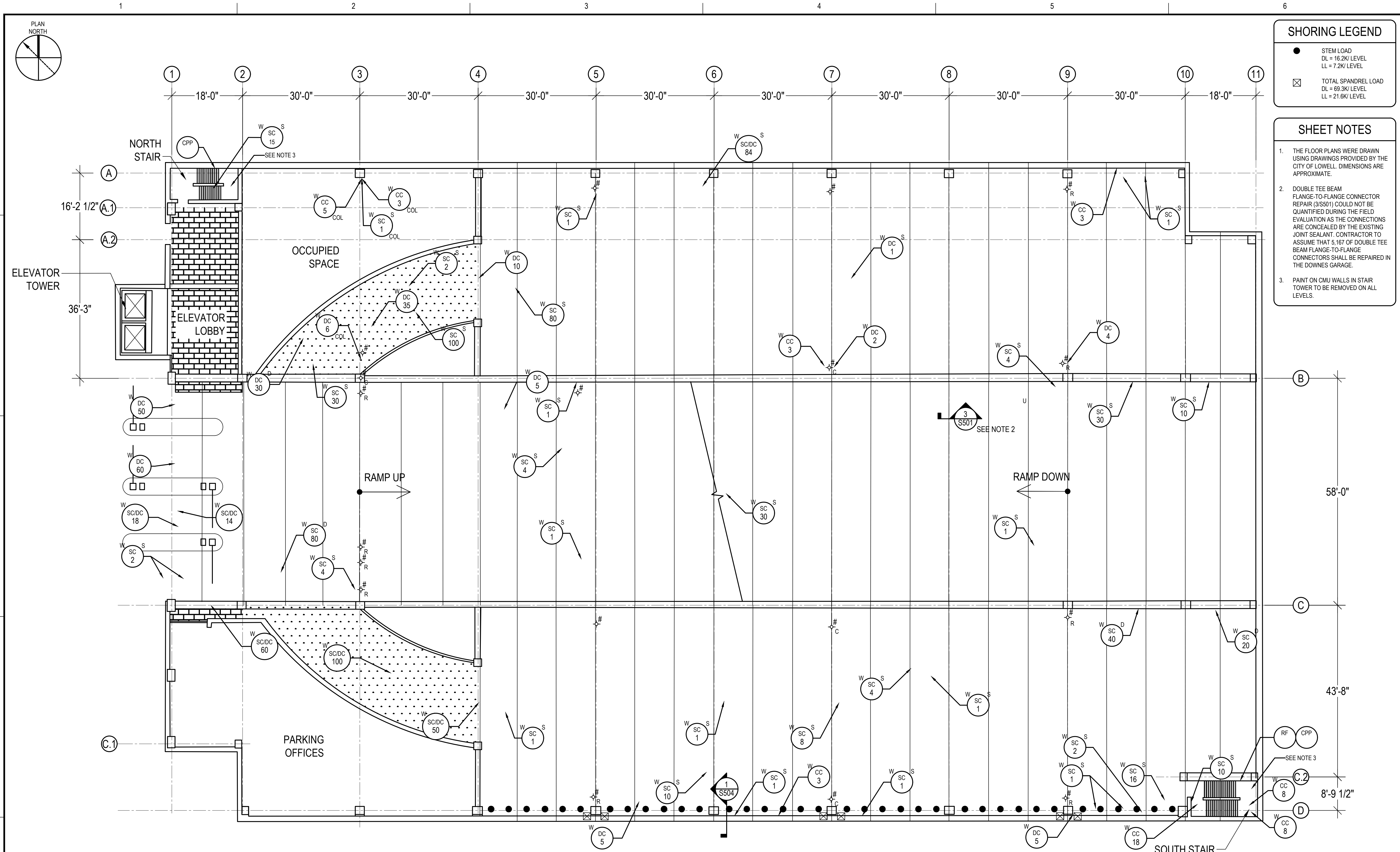
1
S102

UNDERSIDE OF FIRST LEVEL PLAN
(LOWER LEVEL LOOKING UP)

SCALE: NOT TO SCALE

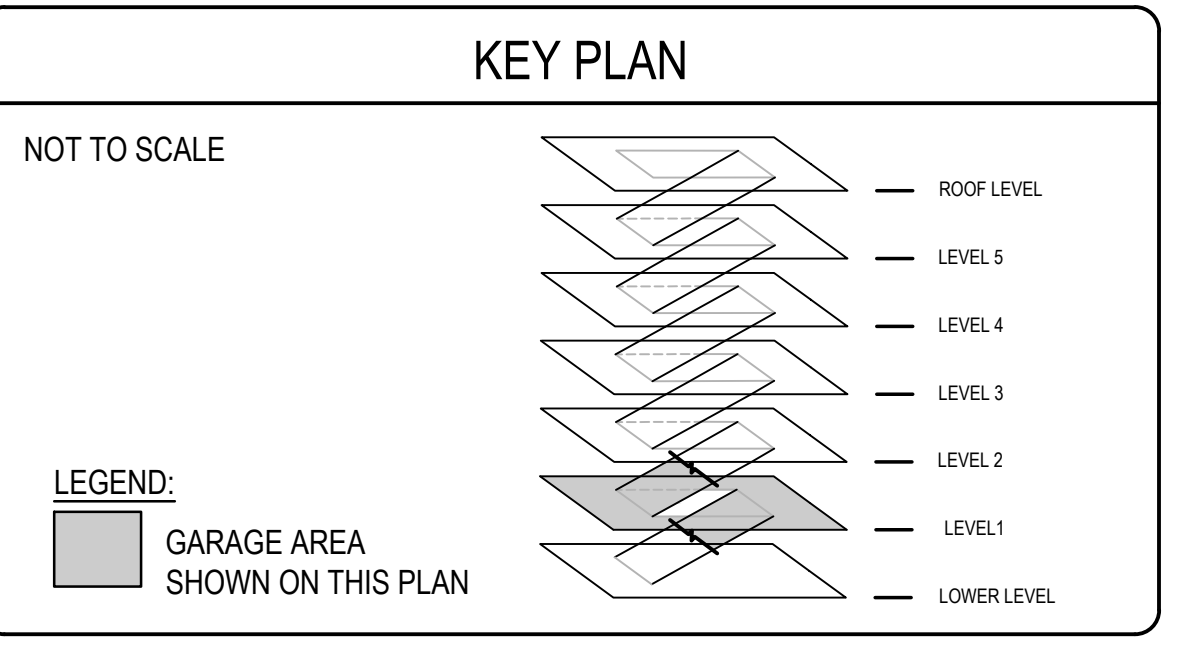
REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC #</div> <div>CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div> <div>SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP S</div> <div>DEFORMED METAL PANEL; S = SEVERE DEFORMATION</div>	<div>CB #</div> <div>CRACKED BRICK; # INDICATES UNITS</div>
<div>DC #</div> <div>DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>#</div> <div>DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED</div>			
			SEALANTS		<div>STEP CRACK; # INDICATES LINEAR FEET</div>
			SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.		





1 FIRST LEVEL PLAN
S103 SCALE: NOT TO SCALE

REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	
<div>CC</div> <div>#</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC</div> <div>#</div>
<div>DC</div> <div>#</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP</div> <div>S</div>
		SEALANTS	
		SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 3&7/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.	
		MASONRY	
		MISCELLANEOUS	
		TRAFFIC COATING	



SHORING LEGEND	
<div>●</div>	STEM LOAD DL = 16.2K/LEVEL LL = 7.2K/LEVEL
<div>☒</div>	TOTAL SPANDREL LOAD DL = 69.3K/LEVEL LL = 21.6K/LEVEL

- SHEET NOTES**
- THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
 - DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.
 - PAINT ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT: RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER: CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

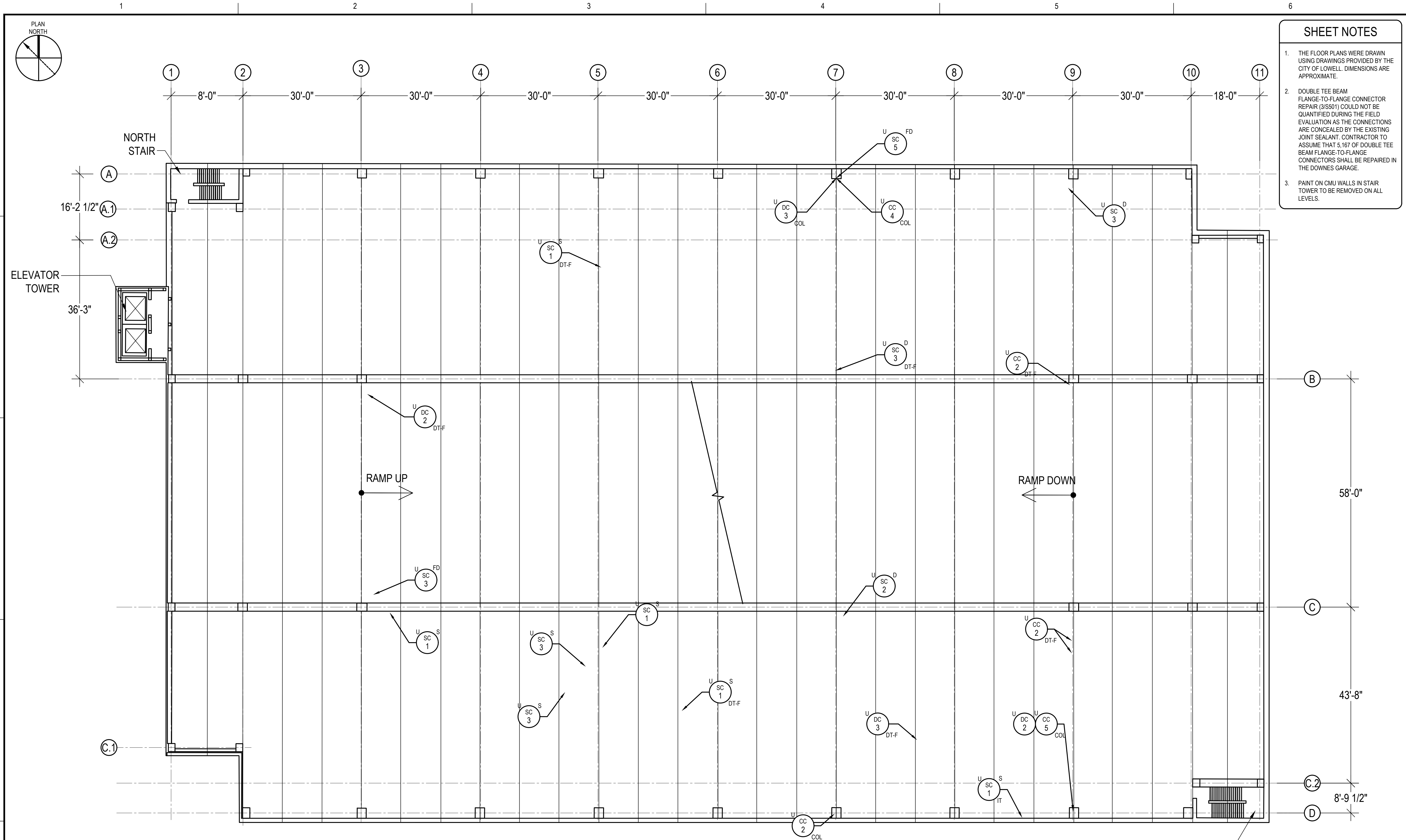
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DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

JOSEPH M. DOWNES GARAGE FIRST LEVEL PLAN

DRAWING NO. S103




- SHEET NOTES
1.

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2.

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PROJECT

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER

CITY OF LOWELL
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CHECKED BY	AEO/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

JOESPH M. DOWNES GARAGE
UNDERSIDE OF
SECOND LEVEL
PLAN

DRAWING NO.

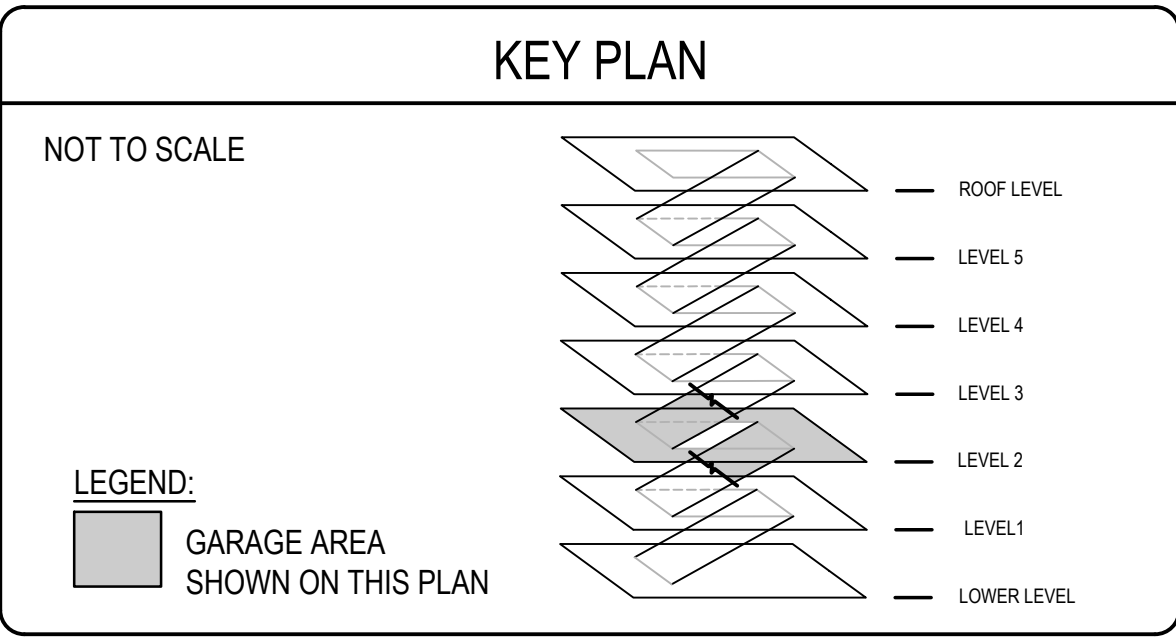
S104

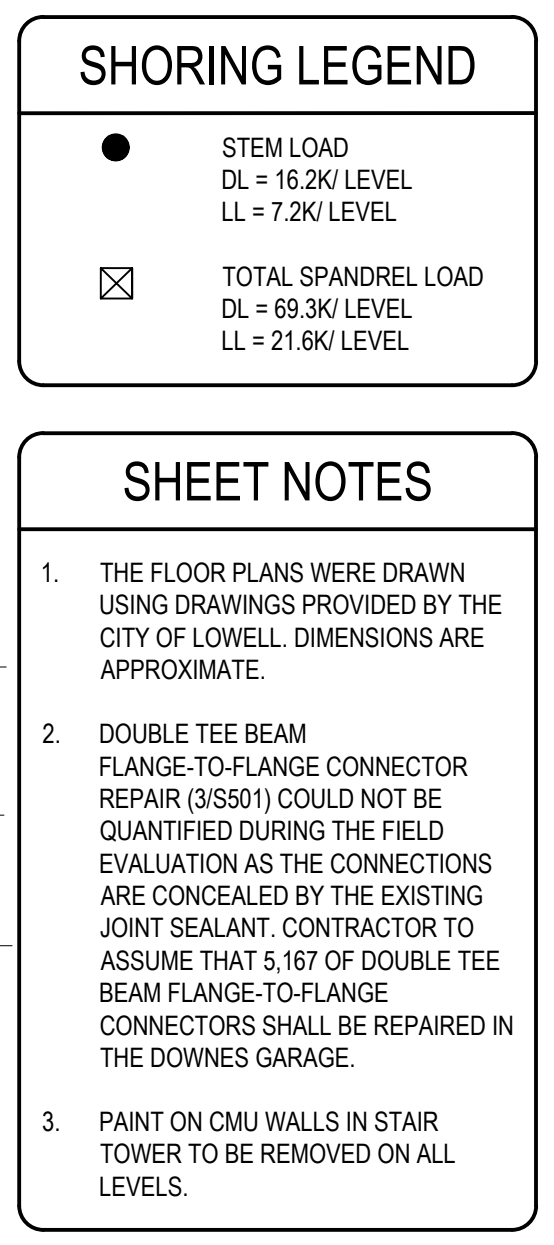
1
S104

UNDERSIDE OF SECOND LEVEL PLAN
(FIRST LEVEL LOOKING UP)

SCALE: NOT TO SCALE

REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC</div> <div>#</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC</div> <div>#</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502
<div>DC</div> <div>#</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>DMP</div> <div>S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
			SEALANTS		
			SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.		
			<div>CB</div> <div>#</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED
			<div>SC</div> <div>#</div>	STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED
			<div>#</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED	




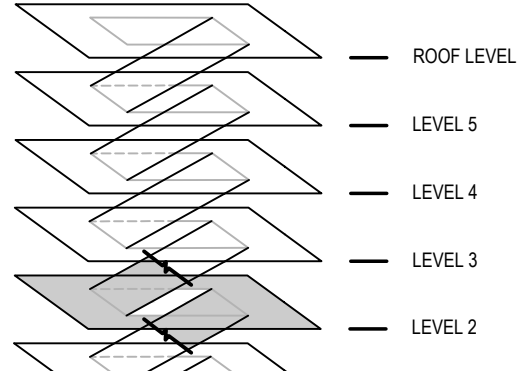


KEY PLAN

NOT TO SCALE

LEGEND:

 GARAGE AREA SHOWN ON THIS PLAN



— ROOF LEVEL

— LEVEL 5

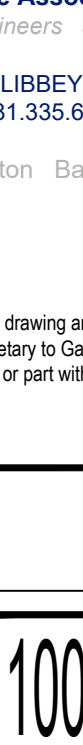
— LEVEL 4

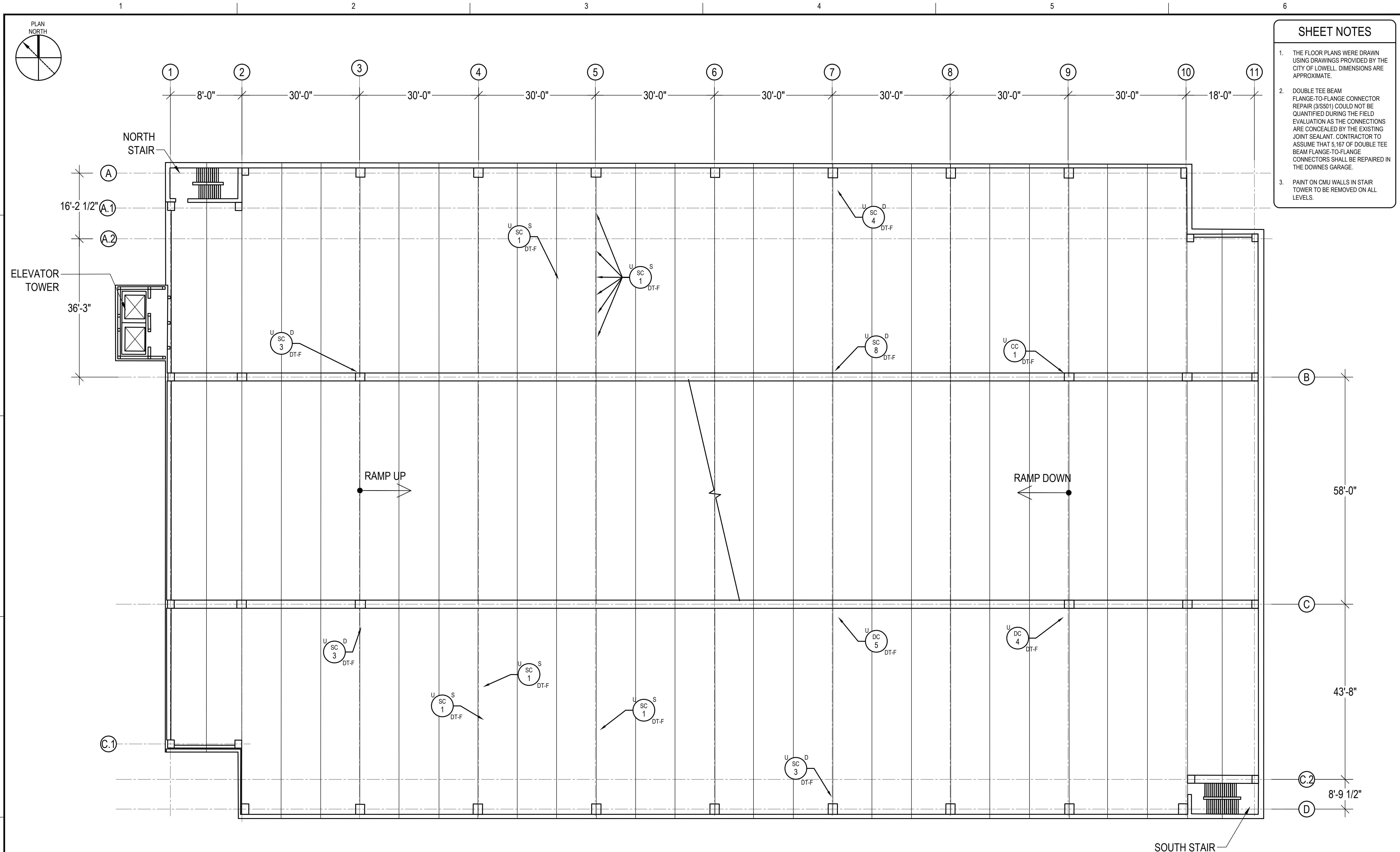
— LEVEL 3

— LEVEL 2

— LEVEL 1

— LOWER LEVEL

			
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100% SUBMISSION			
PROJECT RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA		OWNER CITY OF LOWELL CITY HALL, 375 MERRIMACK ST., 3RD FLOOR LOWELL, MA 01852	
-	-	-	-
-	-	-	-
-	-	-	-
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NO.	DATE	DESCRIPTION	BY
PROJECT NO.		837920	
CADD FILE		837920 S100s	
DESIGNED BY		KMC	
DRAWN BY		KMC	
CHECKED BY		AEO/ACP	
DATE		2/22/2022	
DRAWING SCALE			
GRAPHIC SCALE			
SHEET TITLE			
JOESPH M. DOWNES GARAGE SECOND LEVEL PLAN			
		DRAWING NO.	
		S105	



- SHEET NOTES
1.

THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
2.

DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.
3.

PAYT ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

JOESPH M. DOWNES GARAGE
UNDERSIDE OF
THIRD LEVEL
PLAN

DRAWING NO.

S106

1
S106

UNDERSIDE OF THIRD LEVEL PLAN
(SECOND LEVEL LOOKING UP)

SCALE: NOT TO SCALE

REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC</div> <div>#</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC</div> <div>#</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502
<div>DC</div> <div>#</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>DMP</div> <div>S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
			SEALANTS		
			SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.		
			<div>#</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED	
			<div>CB</div> <div>#</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED
			<div>SC</div> <div>#</div>	STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED

KEY PLAN

NOT TO SCALE

LEGEND:

GARAGE AREA
SHOWN ON THIS PLAN

—

ROOF LEVEL

—

LEVEL 5

—

LEVEL 4

—

LEVEL 3

—

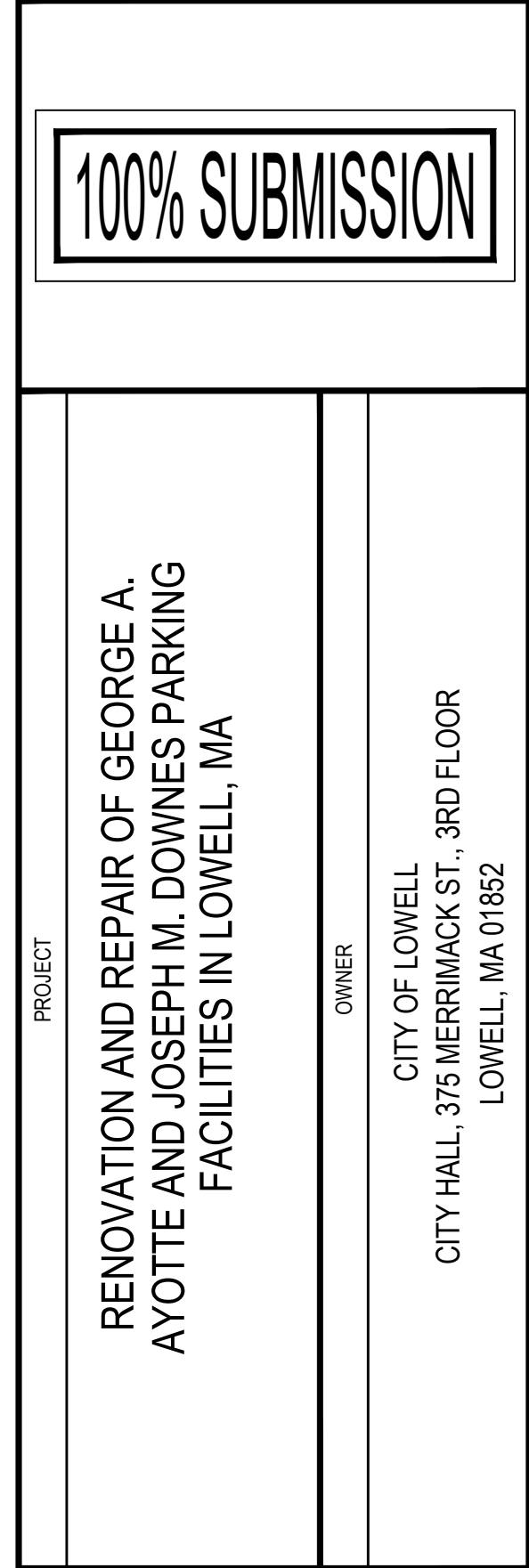
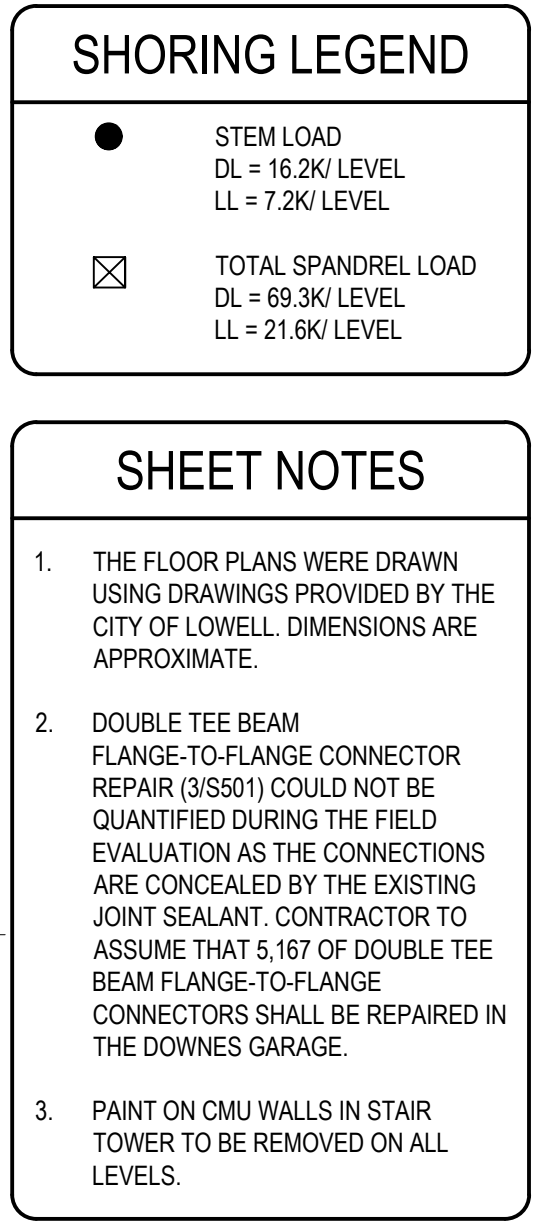
LEVEL 2

—

LEVEL 1

—

LOWER LEVEL



	-	-	-	-
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NO.	DATE	DESCRIPTION	BY	
PROJECT NO.		837920		
CADD FILE		837920 S100s		
DESIGNED BY		KMC		
DRAWN BY		KMC		
CHECKED BY		AEO\ACP		
DATE		2/22/2022		
DRAWING SCALE				

GRAPHIC SCALE

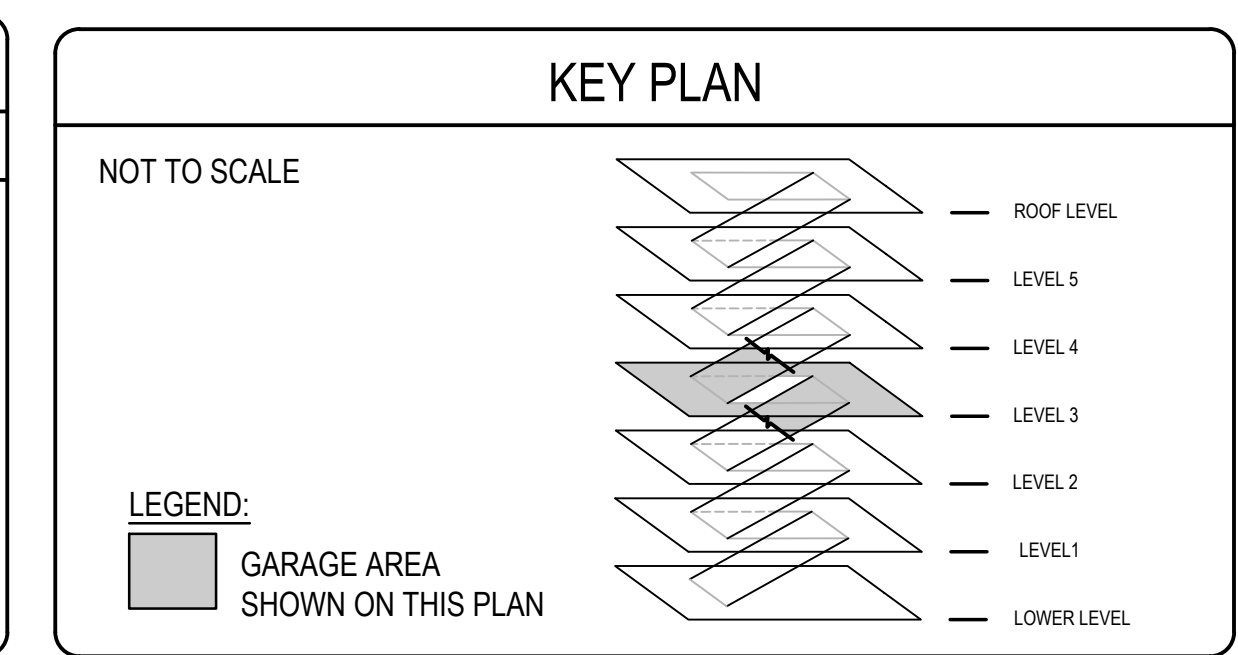
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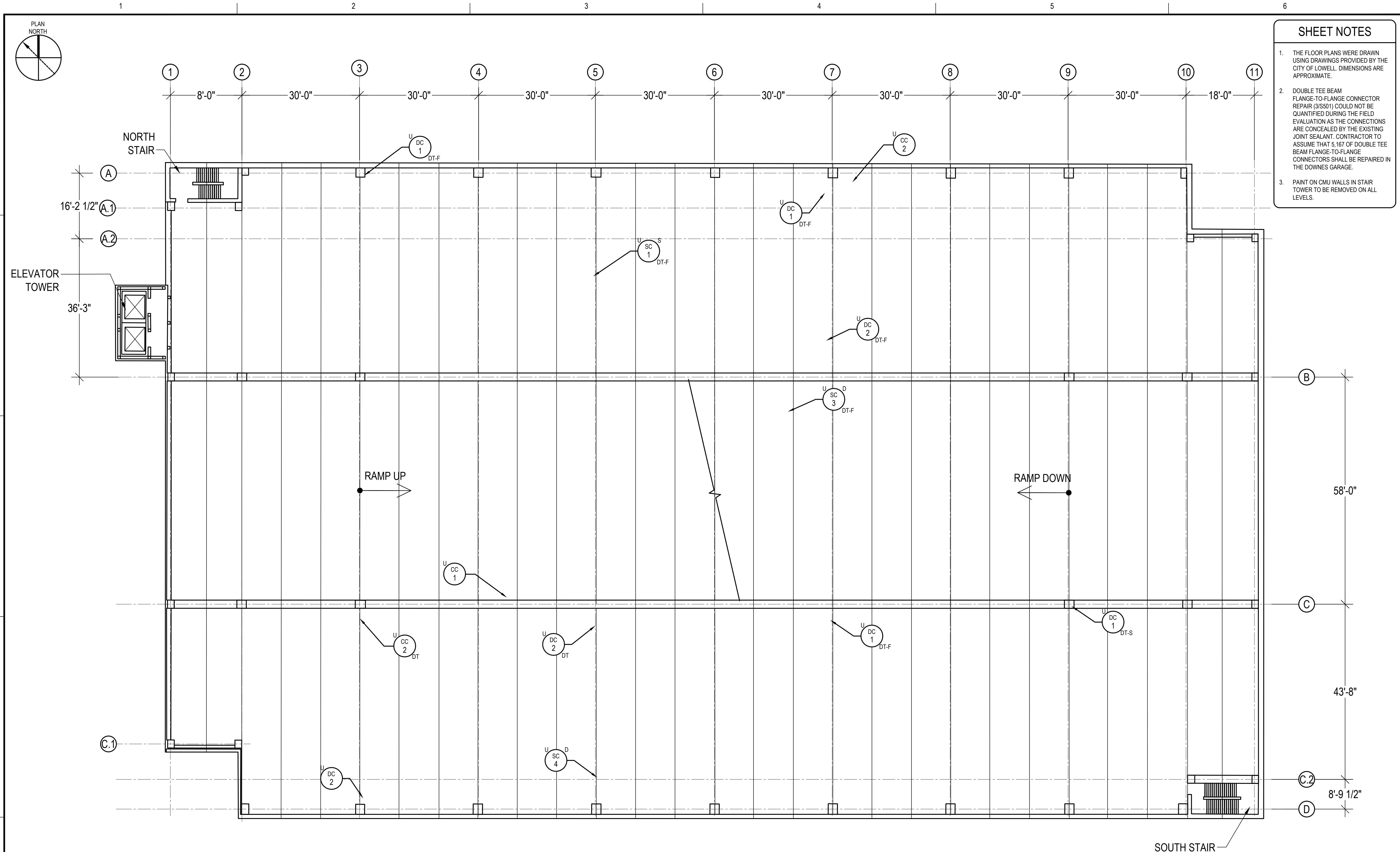
JOESPH M.
DOWNES GARAGE
THIRD LEVEL
PLAN

DRAWING NO.

S107

REPAIR LEGEND								
CONCRETE/STONE			METAL PANEL		MASONRY		MISCELLANEOUS	
<div>CC</div> <div>#</div> <div>CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC</div> <div>#</div> <div>SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP</div> <div>S</div> <div>DEFORMED METAL PANEL; S = SEVERE DEFORMATION</div>	TO BE REPLACED	<div>CB</div> <div>#</div> <div>CRACKED BRICK; # INDICATES UNITS</div>	TO BE REPLACED	<div>CPP</div> <div>CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES. REFER TO SPEC 09 90 00</div>
<div>DC</div> <div>#</div> <div>DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>#</div> <div>DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED</div>		SEALANTS <div>SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66.90 LINEAR FEET AT THE DOWNES GARAGE.</div>		<div>STEP CRACK</div> <div>#</div> <div>STEP CRACK; # INDICATES LINEAR FEET</div>	TO BE REPLACED	<div>RF</div> <div>RUSTED FRAMING</div> <div>STEEL RAILING; TO BE CLEANED, PRIMED AND PAINTED REFER TO SPEC 09 90 00</div>





- SHEET NOTES
1.

THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
2.

DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.
3.

PAIN ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEO/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

JOSEPH M. DOWNES GARAGE
UNDERSIDE OF
FOURTH LEVEL
PLAN

DRAWING NO.

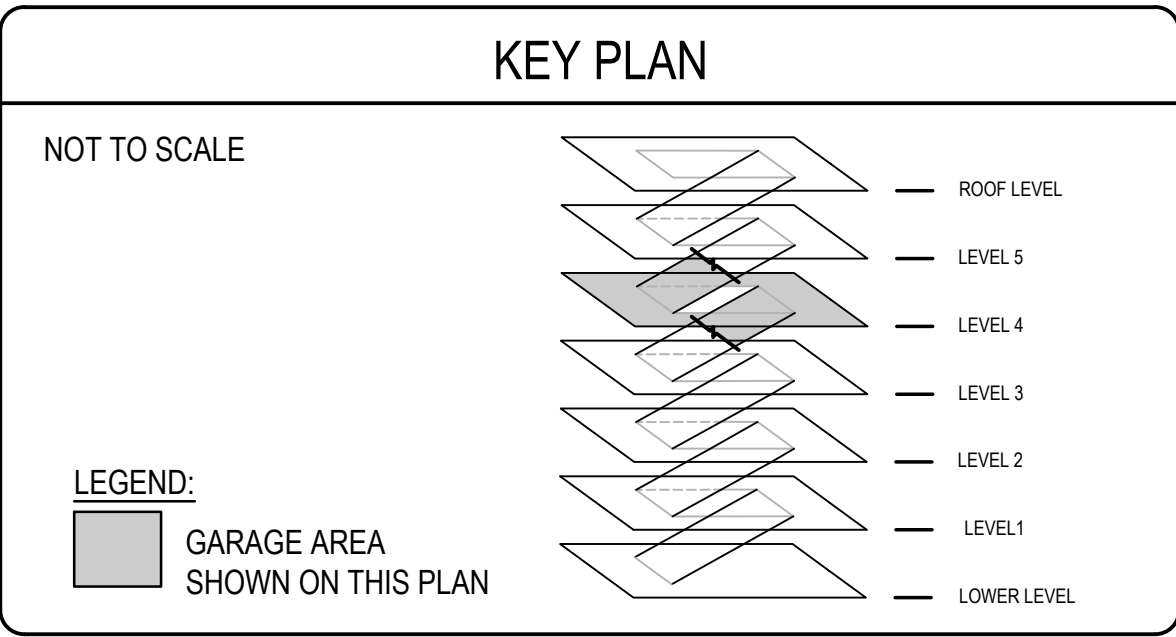
S108

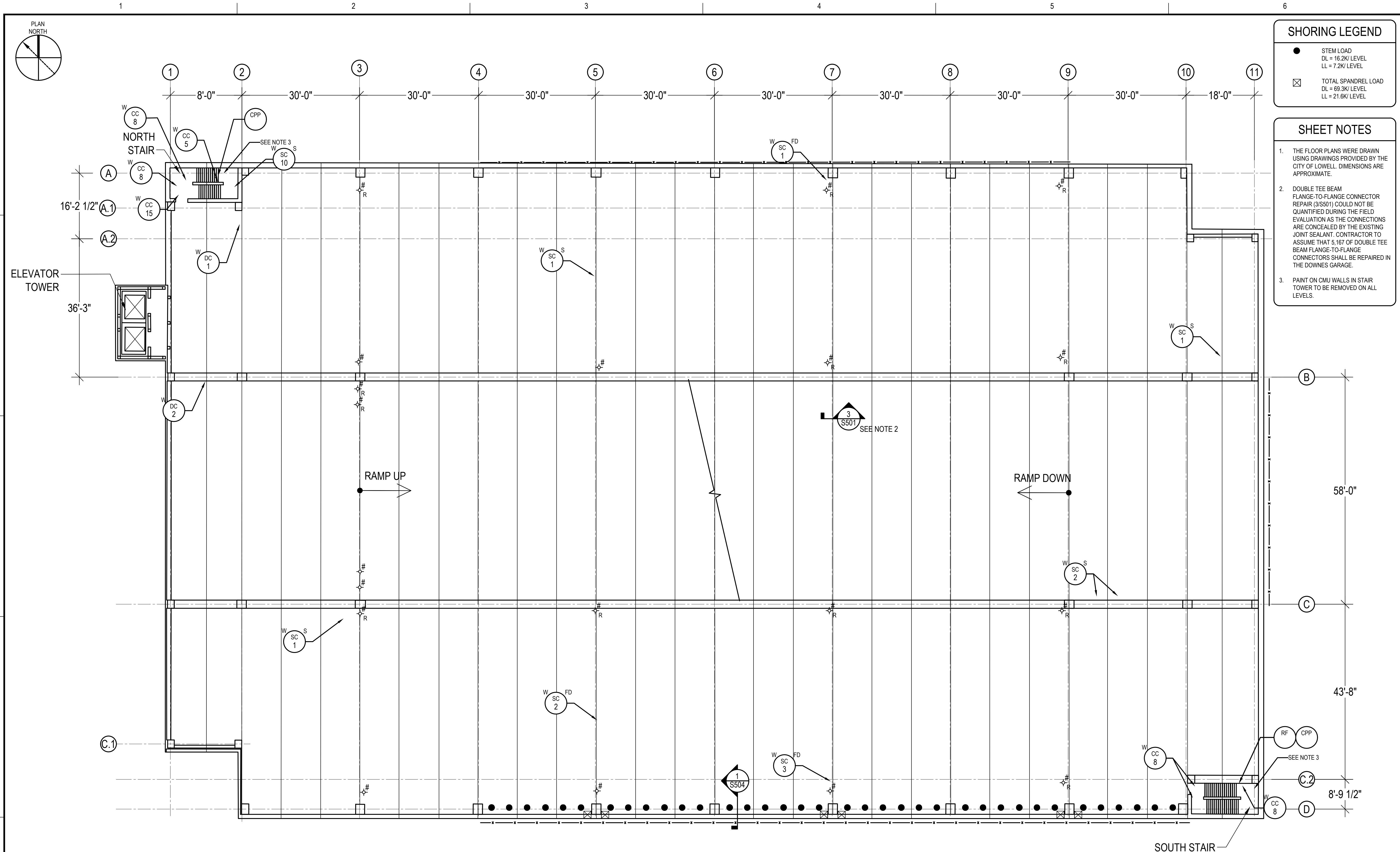
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S108

UNDERSIDE OF FOURTH LEVEL PLAN
(THRID LEVEL LOOKING UP)

SCALE: NOT TO SCALE

REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC</div> <div>#</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC</div> <div>#</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502
<div>DC</div> <div>#</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>DMP</div> <div>S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
			SEALANTS		
			SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.		
			<div>#</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED	
			<div>CB</div> <div>#</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED
			<div>—</div>	STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED





1 FOURTH LEVEL PLAN
SCALE: NOT TO SCALE

REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	
CC # CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	DMP S DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
DC # DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	SEALANTS SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.	
SC # SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502		
# DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED			

KEY PLAN	
NOT TO SCALE	
LEGEND: GARAGE AREA SHOWN ON THIS PLAN	 — ROOF LEVEL — LEVEL 5 — LEVEL 4 — LEVEL 3 — LEVEL 2 — LEVEL 1 — LOWER LEVEL

SHORING LEGEND	
	STEM LOAD DL = 16.2K/LEVEL LL = 7.2K/LEVEL
	TOTAL SPANDREL LOAD DL = 69.3K/LEVEL LL = 21.6K/LEVEL

SHEET NOTES	
1.	THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
2.	DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.
3.	PAINT ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

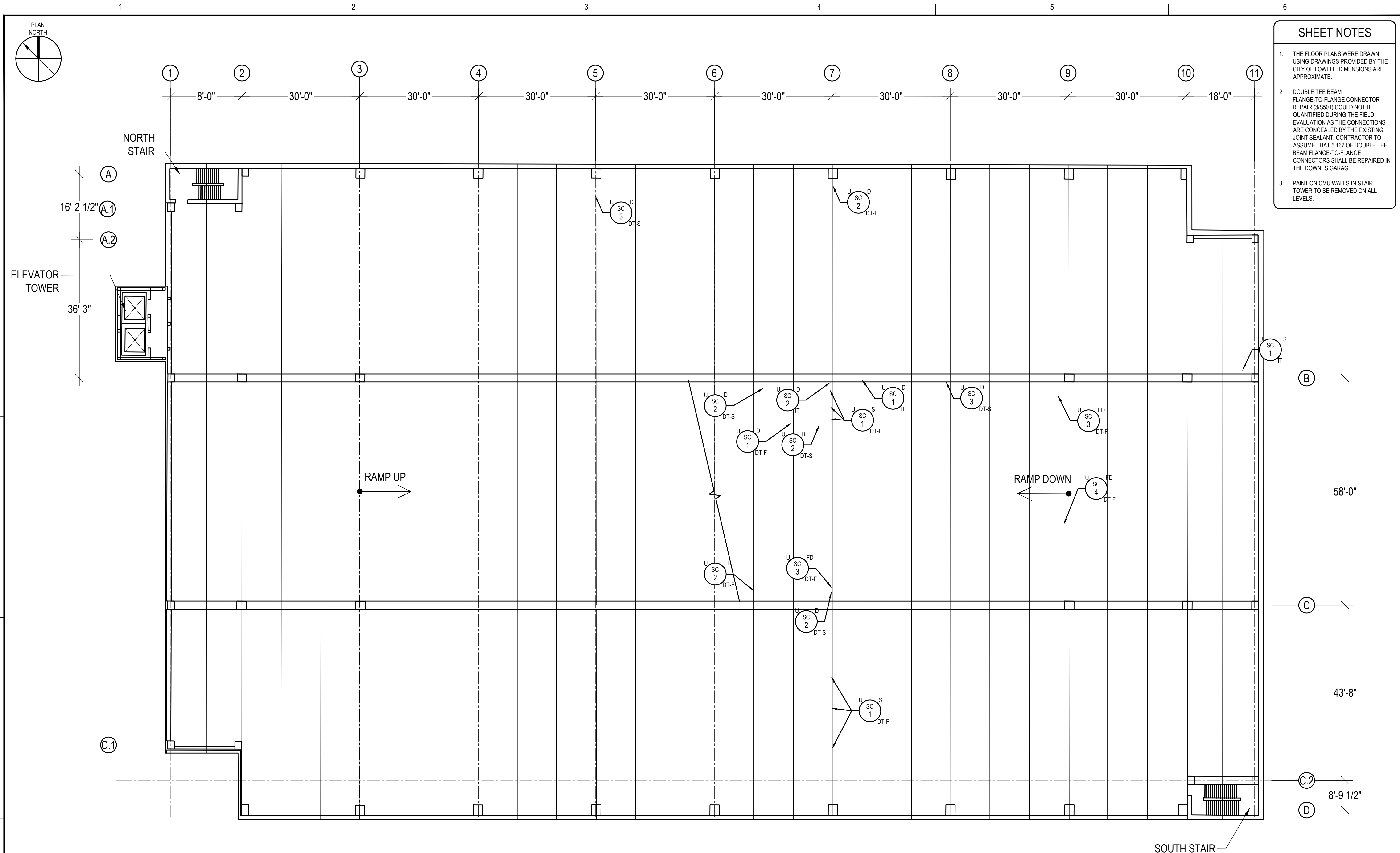
NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

**JOSEPH M. DOWNES GARAGE
FOURTH LEVEL
PLAN**

DRAWING NO.
S109



- SHEET NOTES
1.

THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
2.

DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.
3.

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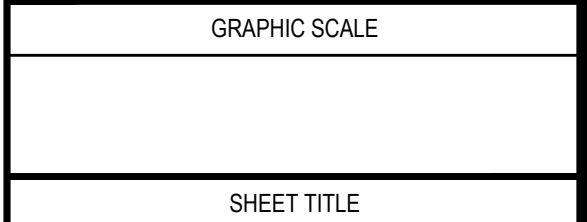
PROJECT

OWNER

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

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CADD FILE		837920 S100s	
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DATE		2/22/2022	
DRAWING SCALE			



SHEET TITLE

JOSEPH M. DOWNES GARAGE
UNDERSIDE OF
FIFTH LEVEL
PLAN

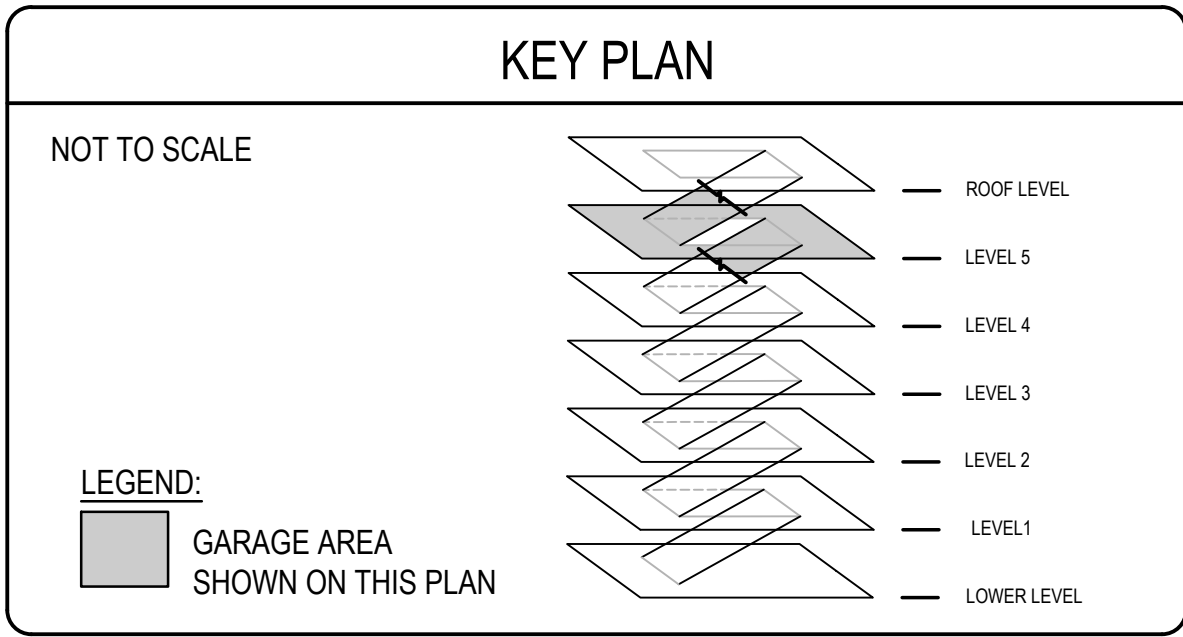
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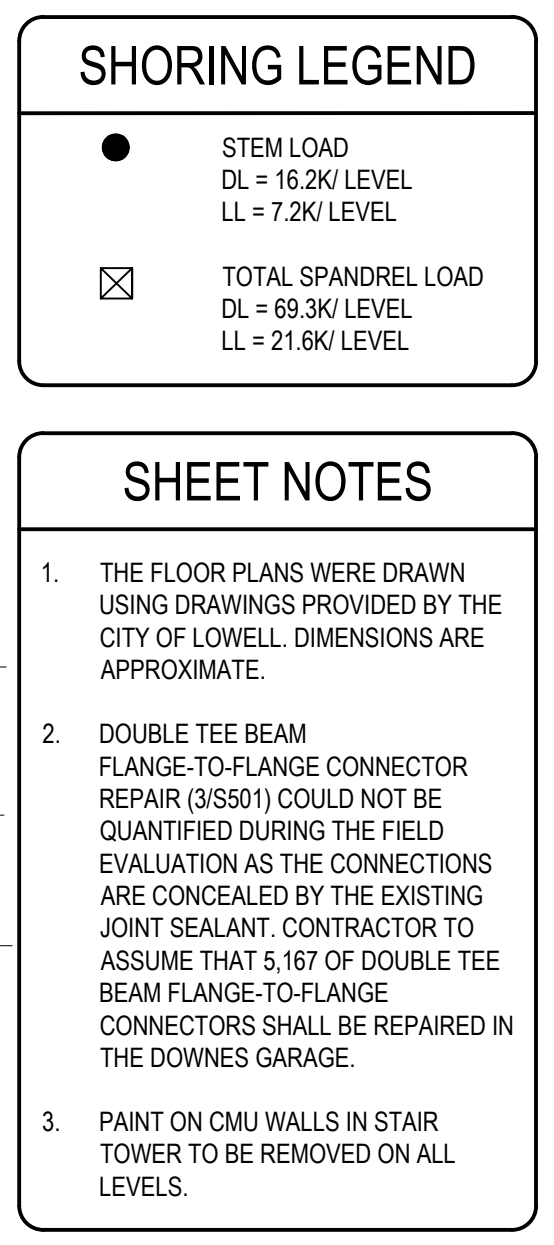
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S110

UNDERSIDE OF FIFTH LEVEL PLAN
(FOURTH LEVEL LOOKING UP)

SCALE: NOT TO SCALE

REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	MASONRY
<div>CC</div> <div>#</div> <div>CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>DMP</div> <div>S</div> <div>DEFORMED METAL PANEL; S = SEVERE DEFORMATION</div>	<div>CB</div> <div>#</div> <div>CRACKED BRICK; # INDICATES UNITS</div>
<div>DC</div> <div>#</div> <div>DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>SEALANTS</div> <div>SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.</div>	<div>TO BE REPLACED</div> <div>TO BE REPLACED</div>
<div>SC</div> <div>#</div> <div>SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502		
<div>#</div> <div>DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED</div>			





100% SUBMISSION

PROJECT

RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
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29	30	31	32

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DRAWING SCALE			

GRAPHIC SCALE

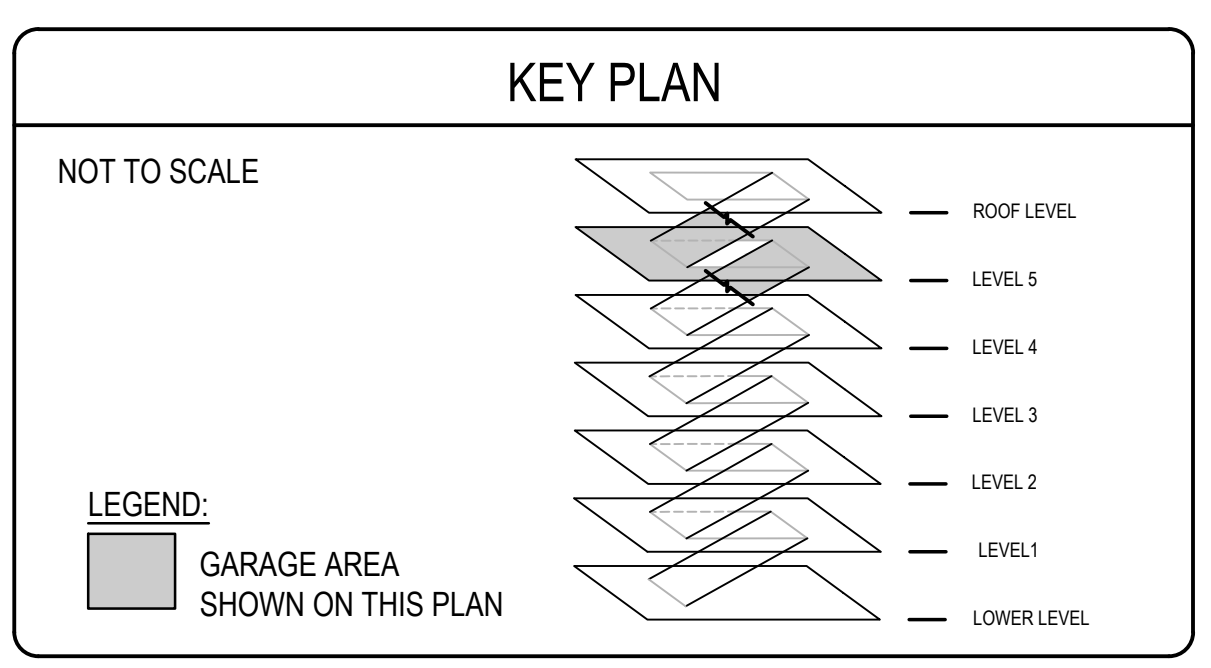
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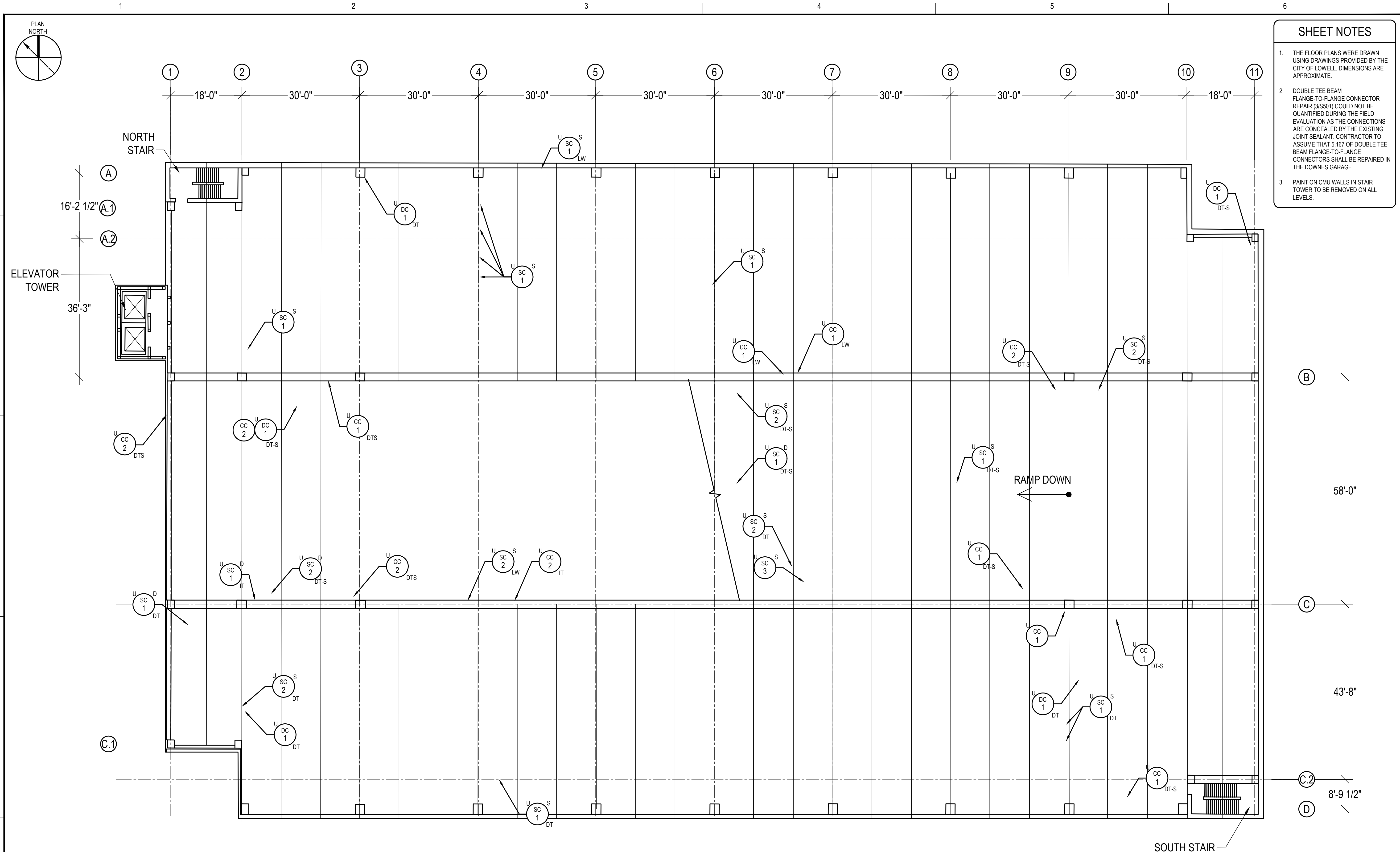
JOSEPH M.
DOWNES GARAGE
FIFTH LEVEL
PLAN

DRAWING NO.

S111

REPAIR LEGEND										
CONCRETE/STONE				METAL PANEL		MASONRY		MISCELLANEOUS		
<div>CC #</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP S</div>	DEFORMED METAL PANEL; # INDICATES SQUARE FEET S = SEVERE DEFORMATION	<div>CB #</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED
<div>DC #</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>SD #</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED		SEALANTS		<div>SCF</div>	STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED
					SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66.900 LINEAR FEET AT THE DOWNES GARAGE.				<div>CPP #</div>	CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES. REFER TO SPEC 09 90 00
									<div>RF</div>	RUSTED FRAMING
									STEEL RAILING; TO BE CLEANED, PRIMED AND PAINTED REFER TO SPEC 09 90 00	





- SHEET NOTES**
- THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
 - DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,167 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE DOWNES GARAGE.
 - PAYT ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT

RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER

CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEO/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

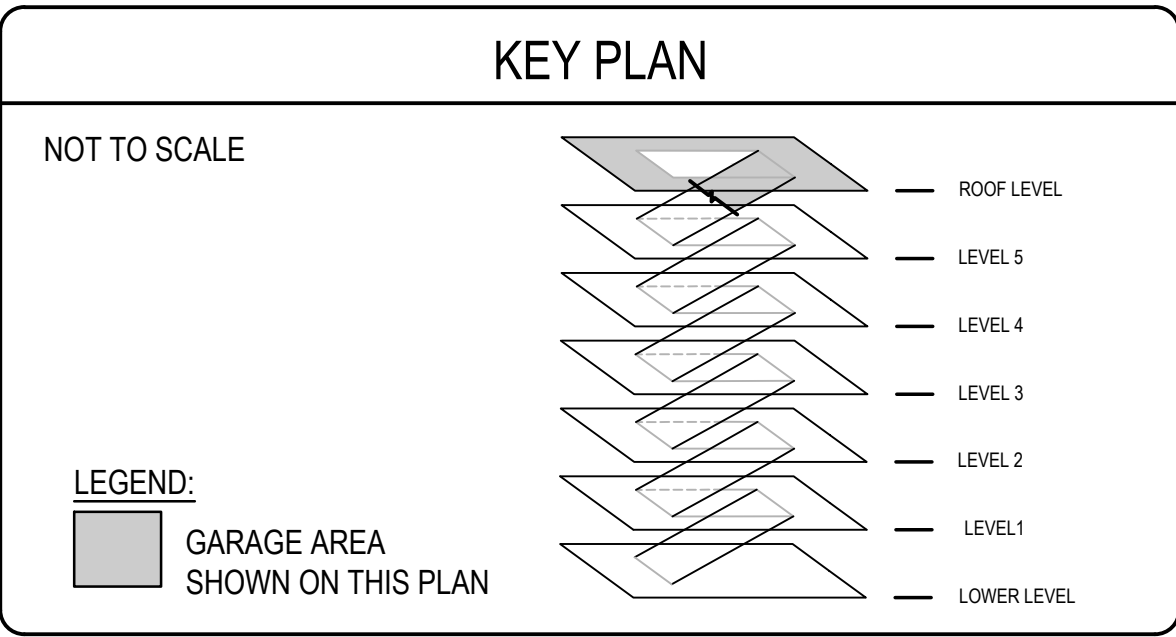
JOSEPH M. DOWNES GARAGE
UNDERSIDE OF
ROOF LEVEL
PLAN

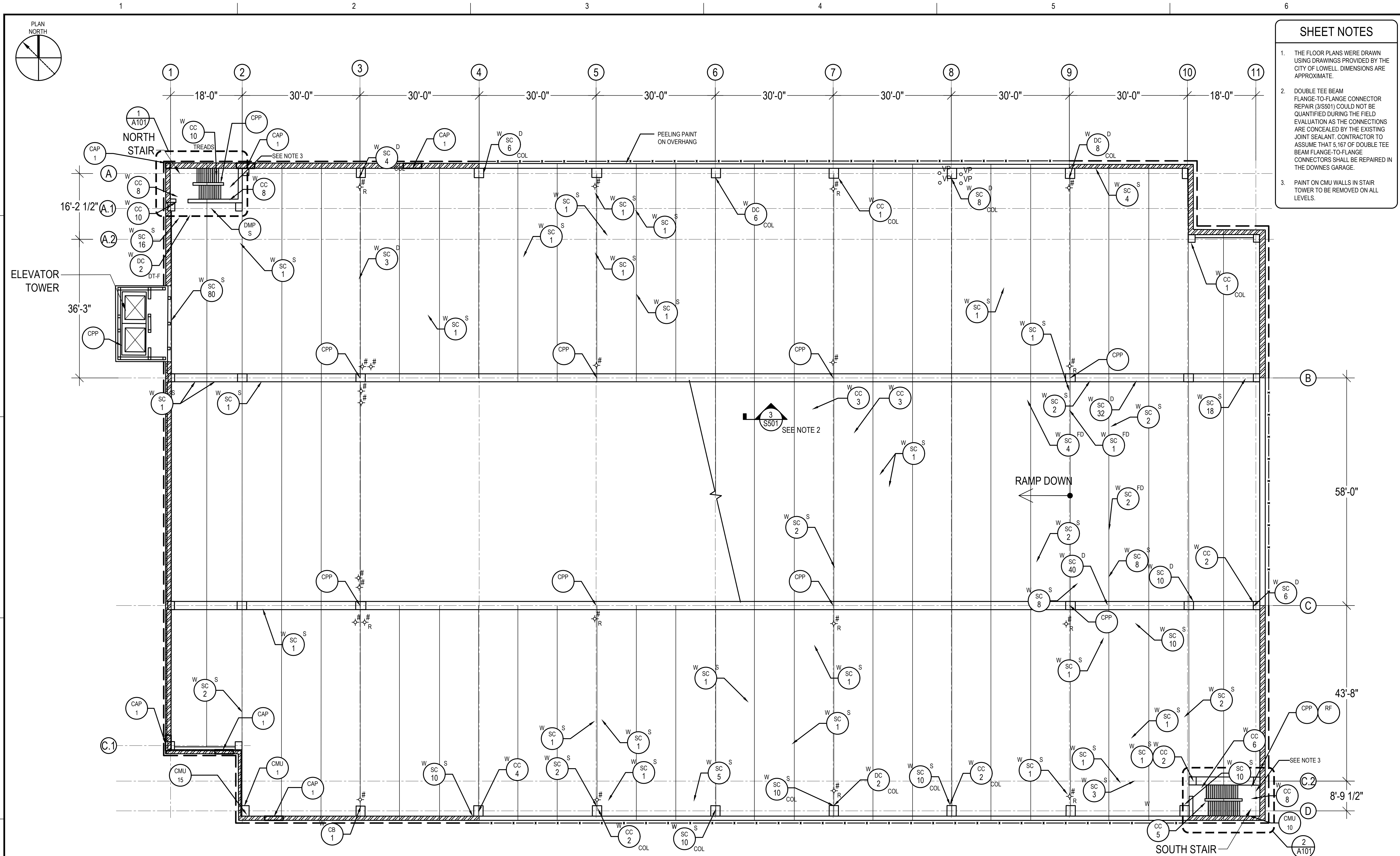
DRAWING NO.

S112

1
S112
UNDERSIDE OF ROOF LEVEL PLAN
(FIFTH LEVEL LOOKING UP)
SCALE: NOT TO SCALE

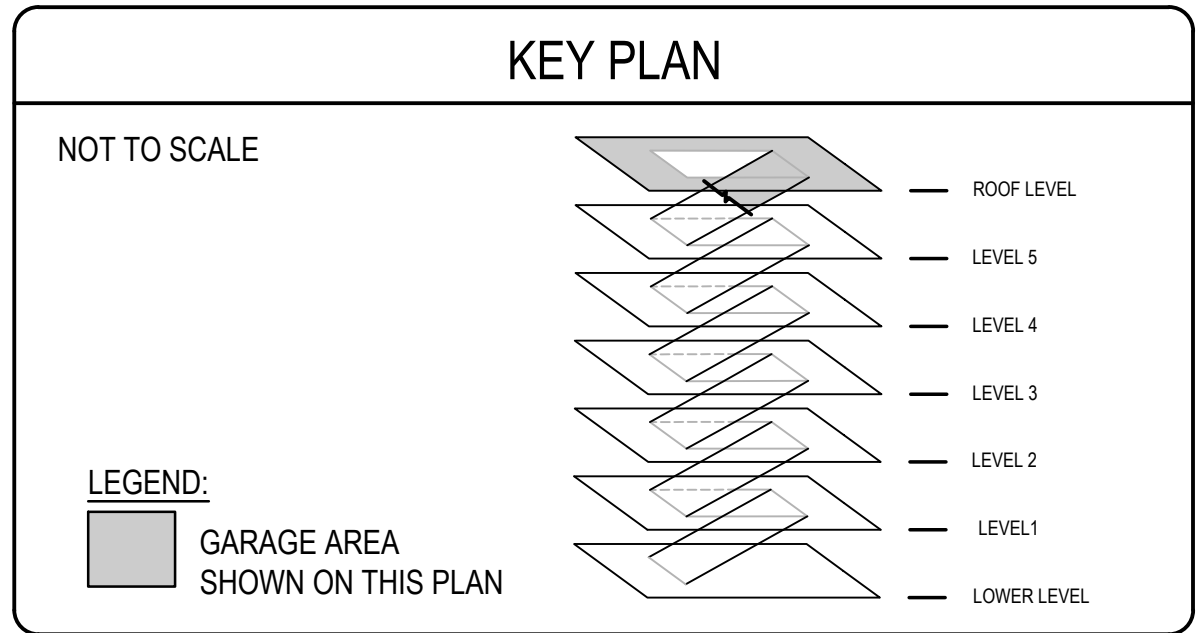
REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	MASONRY
<div>CC #</div> <div>CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE</div> <div>REFER TO REPAIR DETAIL: 4/S501 5/S501</div>	<div>SC #</div> <div>SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div> <div>REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502</div>	<div>DMP S</div> <div>DEFORMED METAL PANEL; S = SEVERE DEFORMATION</div> <div>TO BE REPLACED</div>	<div>CB #</div> <div>CRACKED BRICK; # INDICATES UNITS</div> <div>TO BE REPLACED</div>
<div>DC #</div> <div>DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div> <div>REFER TO REPAIR DETAIL: 1/S501 2/S501</div>	<div>#</div> <div>DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED</div>	<div>SEALANTS</div> <div>SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.</div>	<div>STEP CRACK; # INDICATES LINEAR FEET</div> <div>TO BE REPLACED</div>





1 ROOF LEVEL PLAN
S113 SCALE: NOT TO SCALE

REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	
<div>CC #</div> CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>DMP S</div> DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
<div>DC #</div> DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	SEALANTS	
<div>SC #</div> SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 3&7/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 66,900 LINEAR FEET AT THE DOWNES GARAGE.	
<div>#</div> DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED			
MASONRY		MISCELLANEOUS	
<div>CB #</div> CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED	<div>CPP</div> CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES. REFER TO SPEC 09 90 00	
<div>SC #</div> STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED	<div>RF</div> RUSTED FRAMING	
<div>CAP #</div> DEFECTED CAPSTONE; # INDICATES STONES	TO BE REMOVED/ REPLACED REFER TO DETAIL 3/A701	<div>OR</div> ORNAMENTAL STEEL CORNICE TO BE REMOVED; ABANDONED ANCHOR HOLES TO BE PATCHED WITH REPAIR MORTAR	
<div>CMU #</div> 8" CONCRETE MASONRY UNIT; # INDICATES LINEAR FEET	TO BE REPLACED	<div>SR</div> STEEL RAILING; TO BE CLEANED, PRIMED AND PAINTED REFER TO SPEC 09 90 00	



SHEET NOTES

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- PAINT ON CMU WALLS IN STAIR TOWER TO BE REMOVED ON ALL LEVELS.

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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

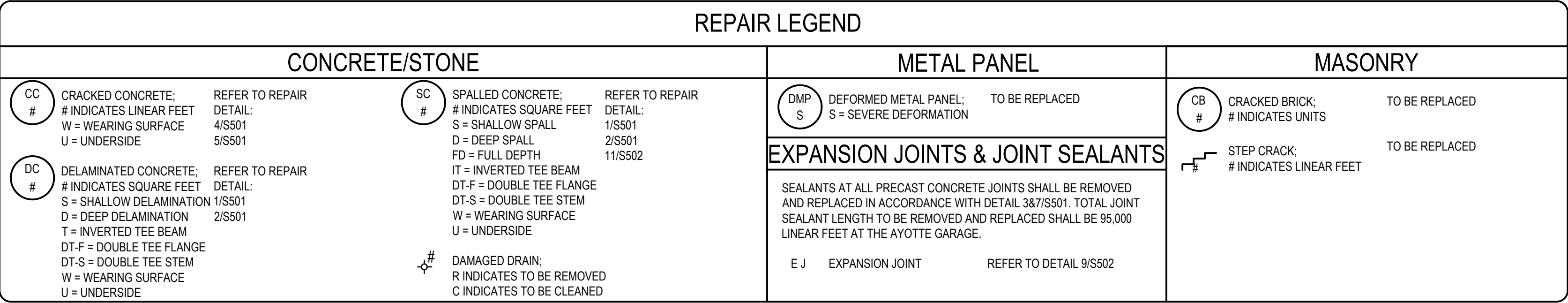
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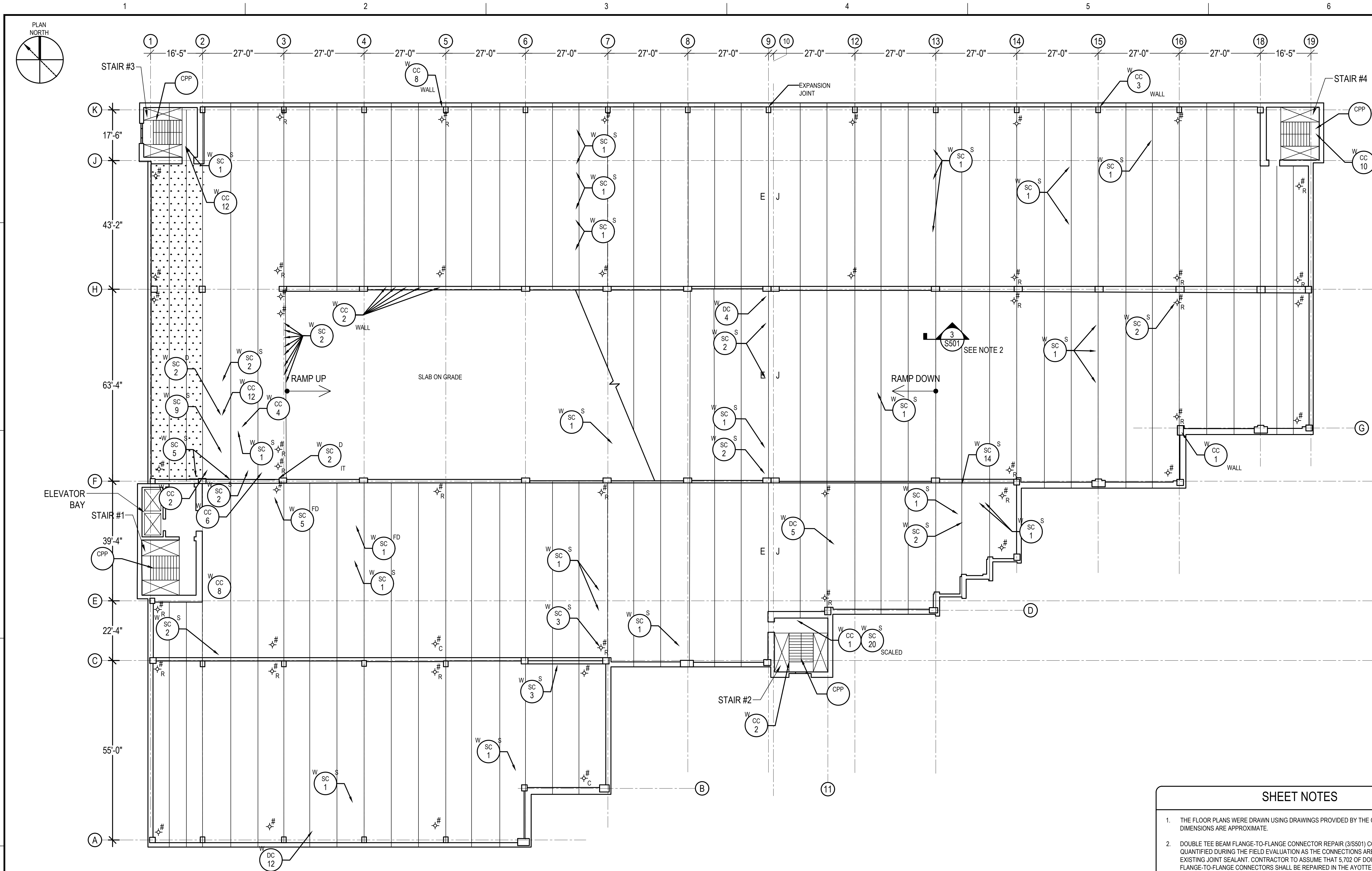
SHEET TITLE

JOSEPH M. DOWNES GARAGE
ROOF LEVEL
PLAN

DRAWING NO.

S113

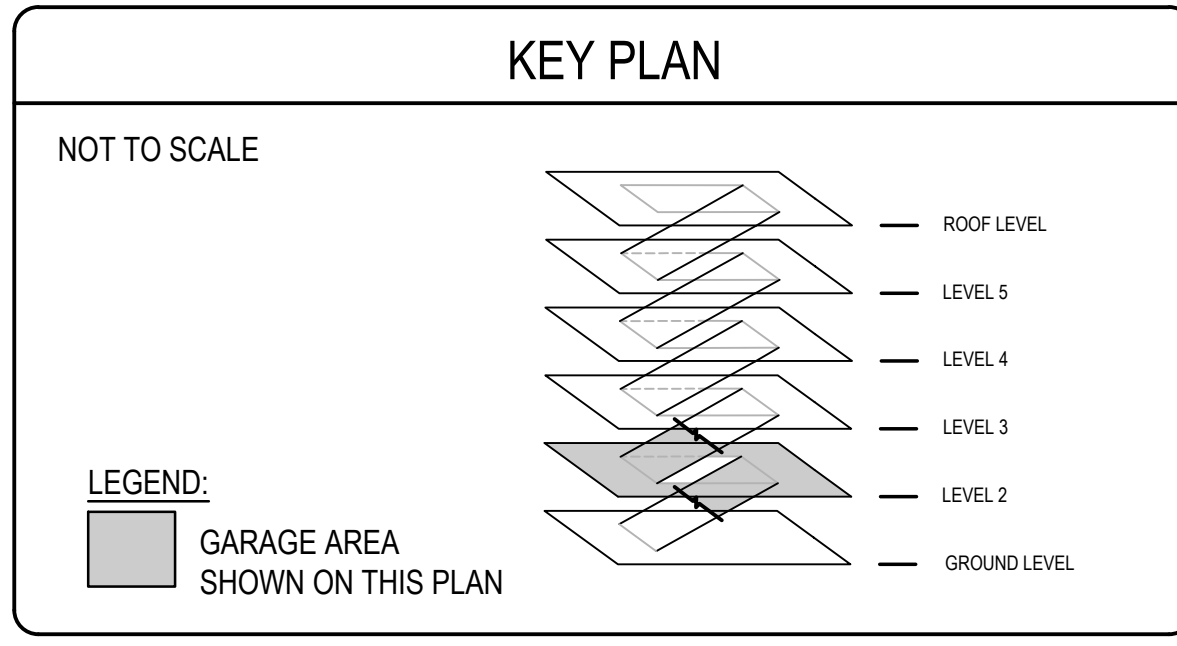




1 SECOND FLOOR PLAN
SCALE: NOT TO SCALE

REPAIR LEGEND													
CONCRETE/STONE				METAL PANEL		MASONRY		MISCELLANEOUS					
<div>CC</div> <div>#</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC</div> <div>#</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP</div> <div>S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED	<div>CB</div> <div>#</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED	<div>CPP</div>	CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES. REFER TO SPEC 09 90 00
EXPANSION JOINTS & JOINT SEALANTS													
SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.													
E J		EXPANSION JOINT		REFER TO DETAIL 9/S502									

- SHEET NOTES**
- THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
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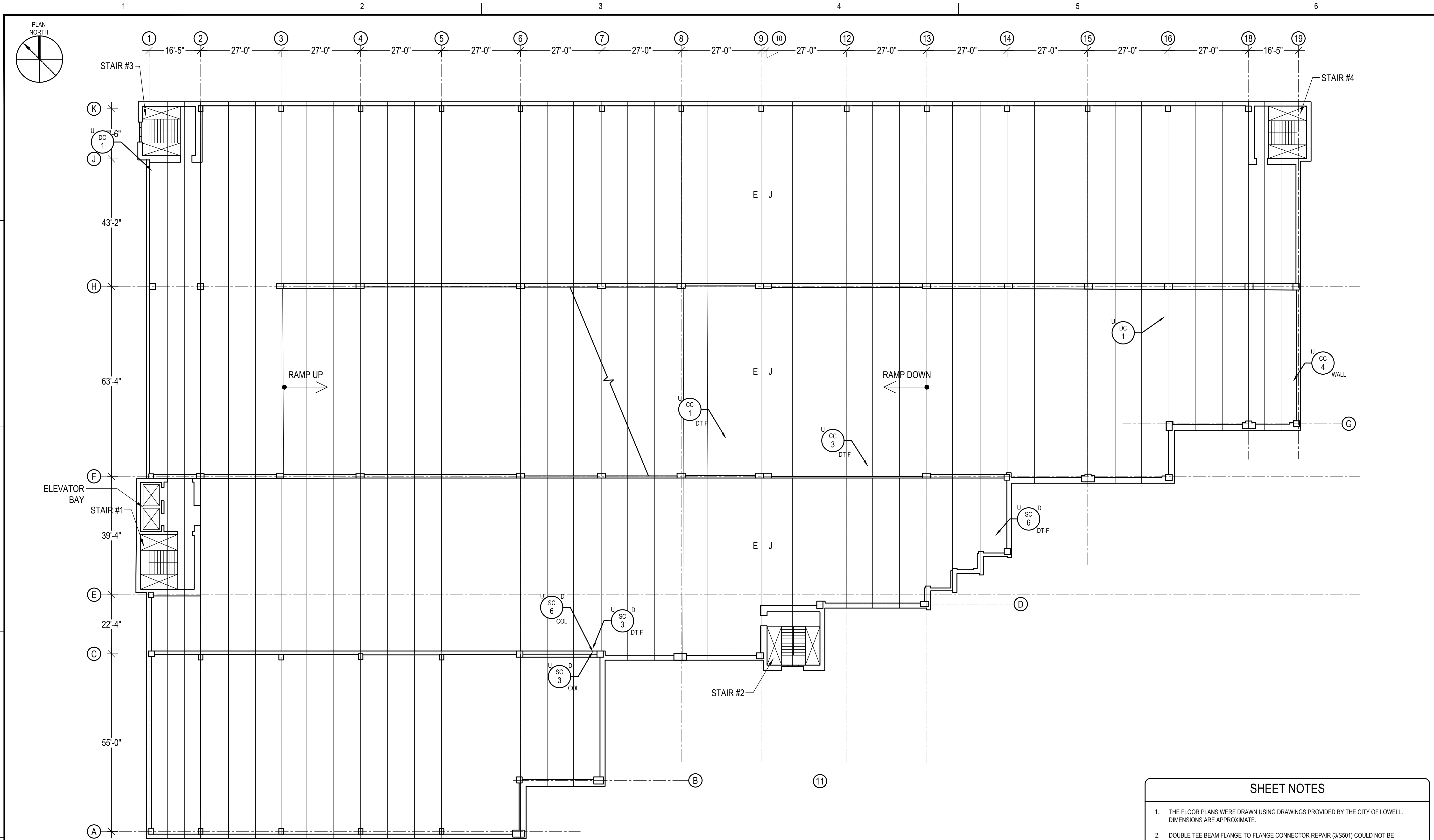
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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

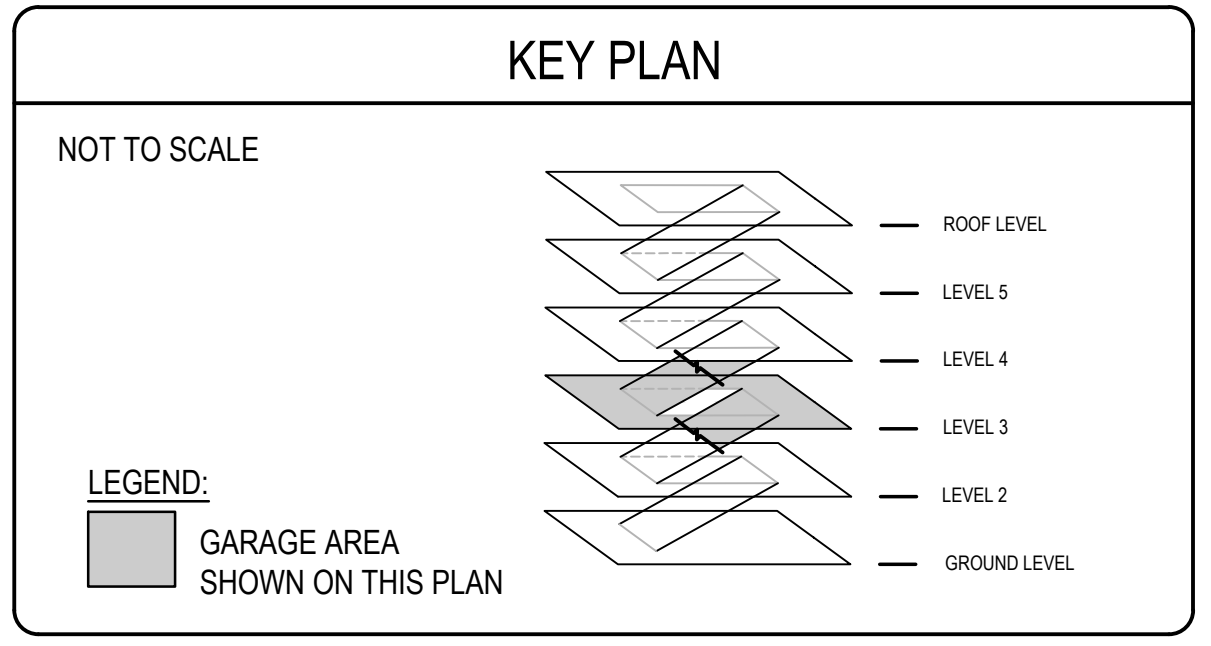
NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEO/ACP		
DATE	2/22/2022		
DRAWING SCALE			
GRAPHIC SCALE			
SHEET TITLE			
GEORGE A. AYOTTE GARAGE SECOND FLOOR PLAN			
DRAWING NO.			S116



**UNDERSIDE OF THIRD FLOOR PLAN
(SECOND LEVEL LOOKING UP)**
SCALE: NOT TO SCALE

REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC #</div> <div>CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div> <div>SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP S</div> <div>DEFORMED METAL PANEL; S = SEVERE DEFORMATION</div>	<div>CB #</div> <div>CRACKED BRICK; # INDICATES UNITS</div>
<div>DC #</div> <div>DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE</div>	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>#</div> <div>DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED</div>	<div>EXPANSION JOINTS & JOINT SEALANTS</div> <div>SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.</div>		
			E J	EXPANSION JOINT	REFER TO DETAIL 9/S502
					<div>STEP CRACK; # INDICATES LINEAR FEET</div>

- SHEET NOTES**
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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

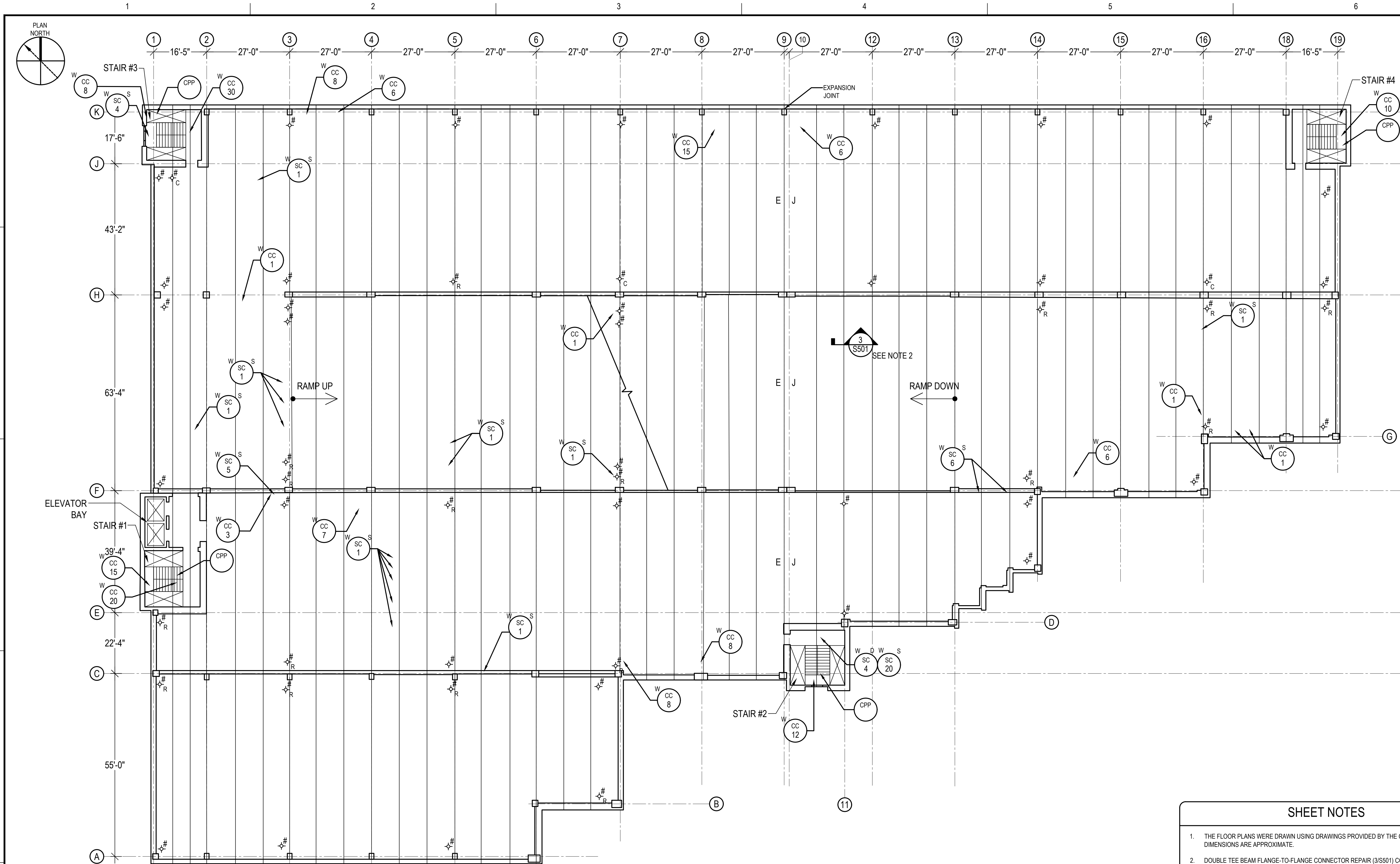
NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

**GEORGE A. AYOTTE GARAGE
UNDERSIDE OF
THIRD FLOOR
PLAN**

DRAWING NO.
S117



1
S118
THIRD FLOOR PLAN
SCALE: NOT TO SCALE

REPAIR LEGEND									
CONCRETE/STONE					METAL PANEL		MASONRY		
<div>CC #</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET DETAIL: S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED	
<div>DC #</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>CS #</div>	CRAKED SURFACE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	EXPANSION JOINTS & JOINT SEALANTS			
						SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 3&T/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.			
						E J	EXPANSION JOINT	REFER TO DETAIL 9/S502	
						MISCELLANEOUS			
						<div>CPP</div>	CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES	REFER TO SPEC 09 90 00	

SHEET NOTES			
1.	THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.		
2.	DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,702 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE AYOTTE GARAGE.		

KEY PLAN	
NOT TO SCALE	
	— ROOF LEVEL
	— LEVEL 5
	— LEVEL 4
	— LEVEL 3
	— LEVEL 2
	— GROUND LEVEL
LEGEND: GARAGE AREA SHOWN ON THIS PLAN	

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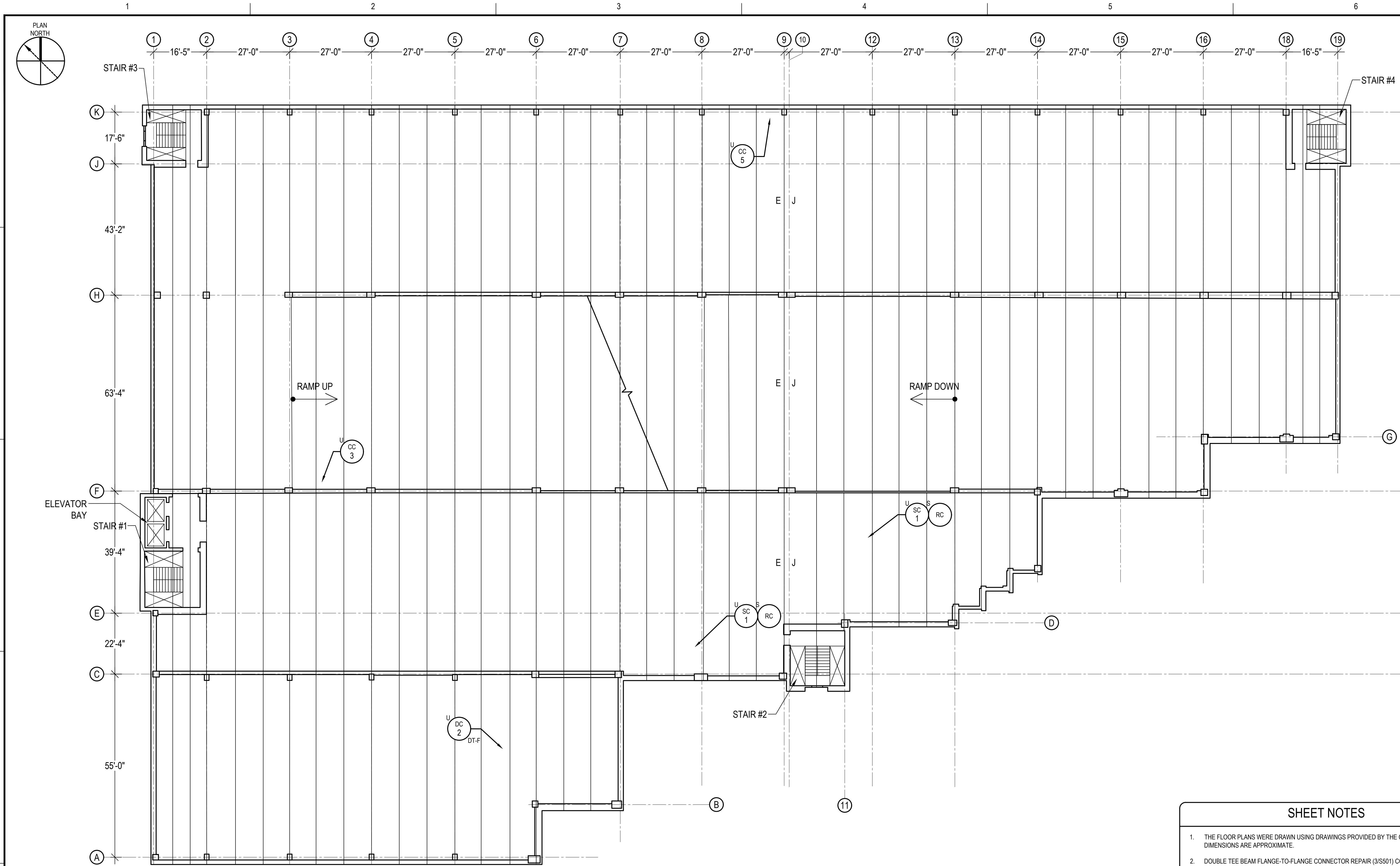
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DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

GEORGE A. AYOTTE GARAGE
THIRD FLOOR
PLAN

DRAWING NO.
S118



UNDERSIDE OF FOURTH FLOOR PLAN
(THIRD LEVEL LOOKING UP)

1
S119
SCALE: NOT TO SCALE

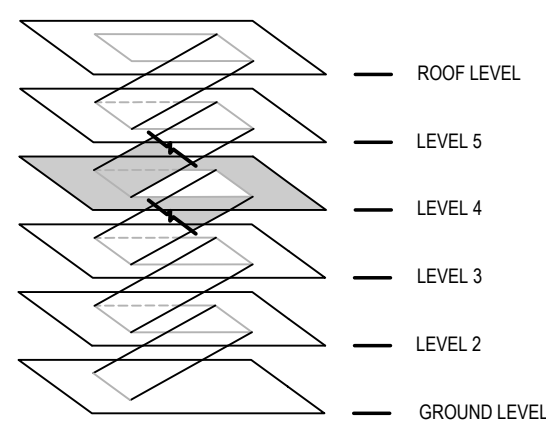
REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC #</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502
<div>DC #</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>DMP S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
			EXPANSION JOINTS & JOINT SEALANTS		
			SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.		
			E J	EXPANSION JOINT	REFER TO DETAIL 9/S502
			<div>#</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED	

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KEY PLAN

NOT TO SCALE



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PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY	KMC		
DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

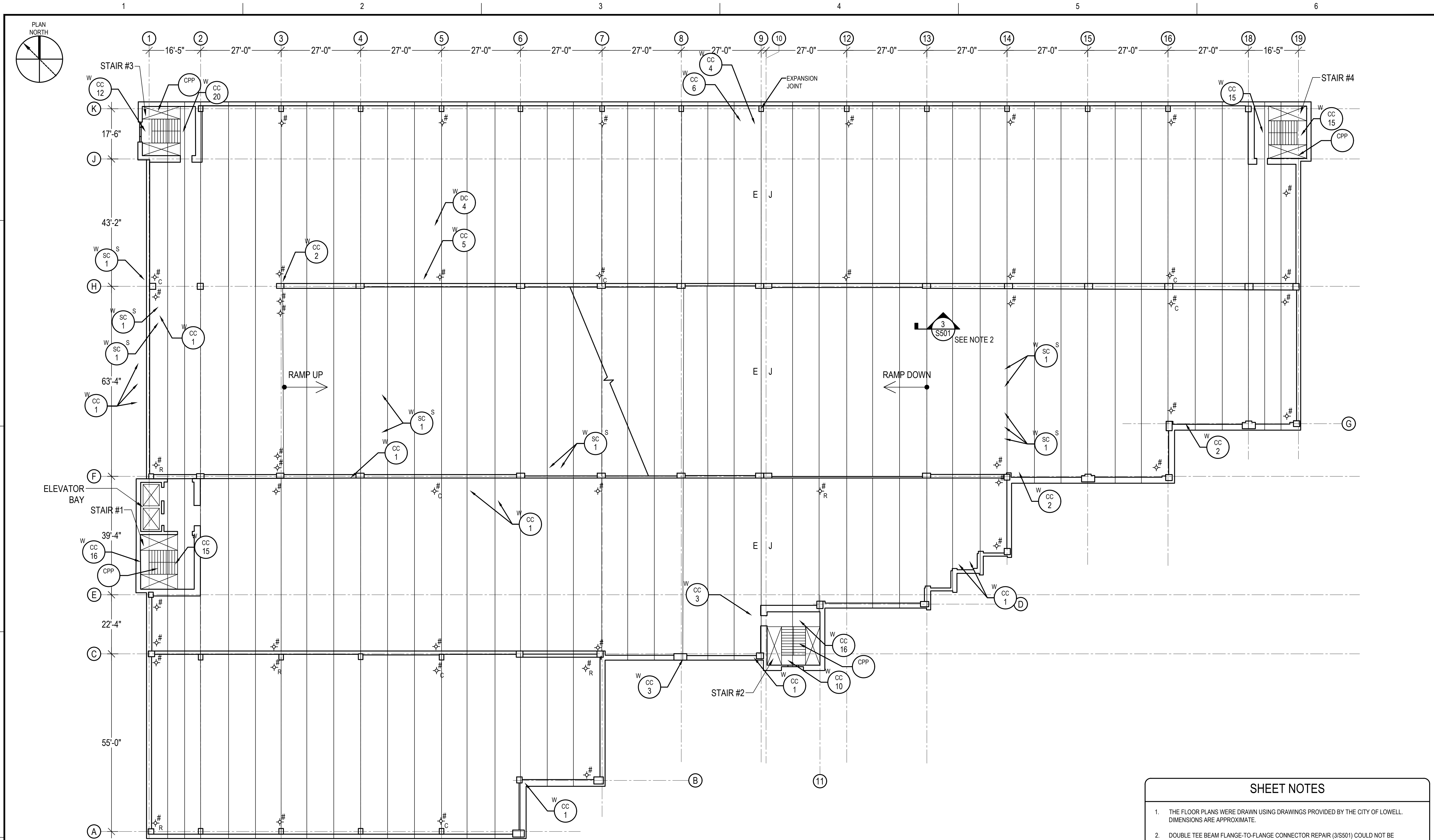
GRAPHIC SCALE

SHEET TITLE

GEORGE A.
AYOTTE GARAGE
UNDERSIDE OF
FOURTH FLOOR
PLAN

DRAWING NO.

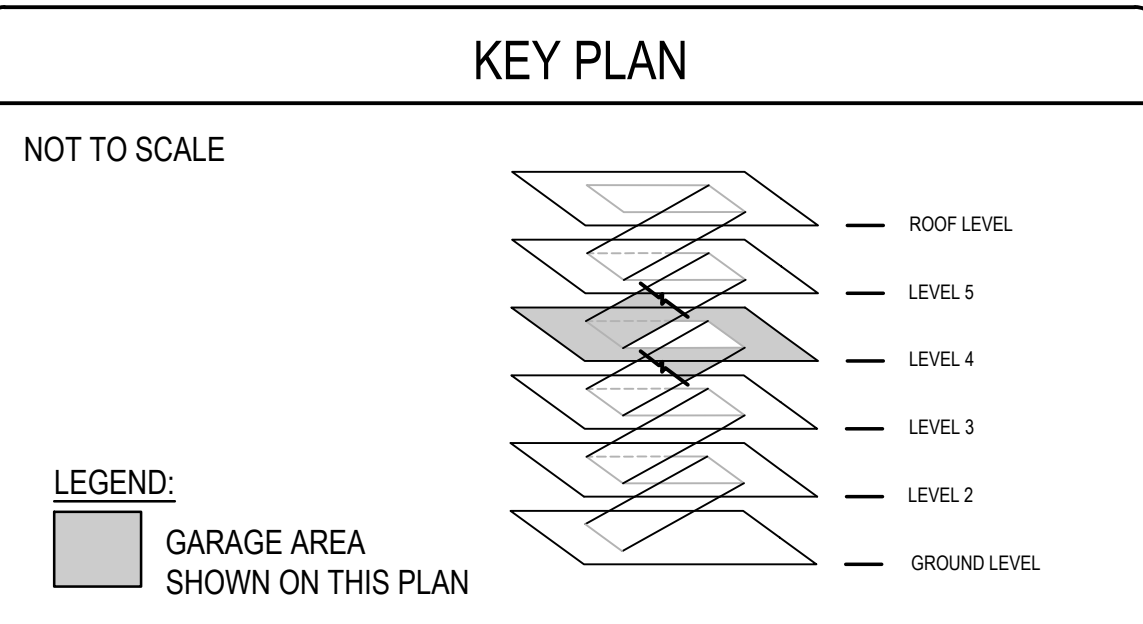
S119



1
S120
FOURTH FLOOR PLAN
SCALE: NOT TO SCALE

REPAIR LEGEND										
CONCRETE/STONE					METAL PANEL		MASONRY			
<div>CC #</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP S</div>	DEFORMED METAL PANEL; TO BE REPLACED S = SEVERE DEFORMATION		<div>CB #</div>	CRACKED BRICK; # INDICATES UNITS TO BE REPLACED
<div>DC #</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>CS #</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED		EXPANSION JOINTS & JOINT SEALANTS				
						SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.				
						E J	EXPANSION JOINT	REFER TO DETAIL 9/S502	<div>SC #</div>	STEP CRACK; # INDICATES LINEAR FEET TO BE REPLACED
						MISCELLANEOUS				
						<div>CPP</div>	CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES	REFER TO SPEC 09 90 00		

- SHEET NOTES**
- THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
 - DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,702 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE AYOTTE GARAGE.



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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

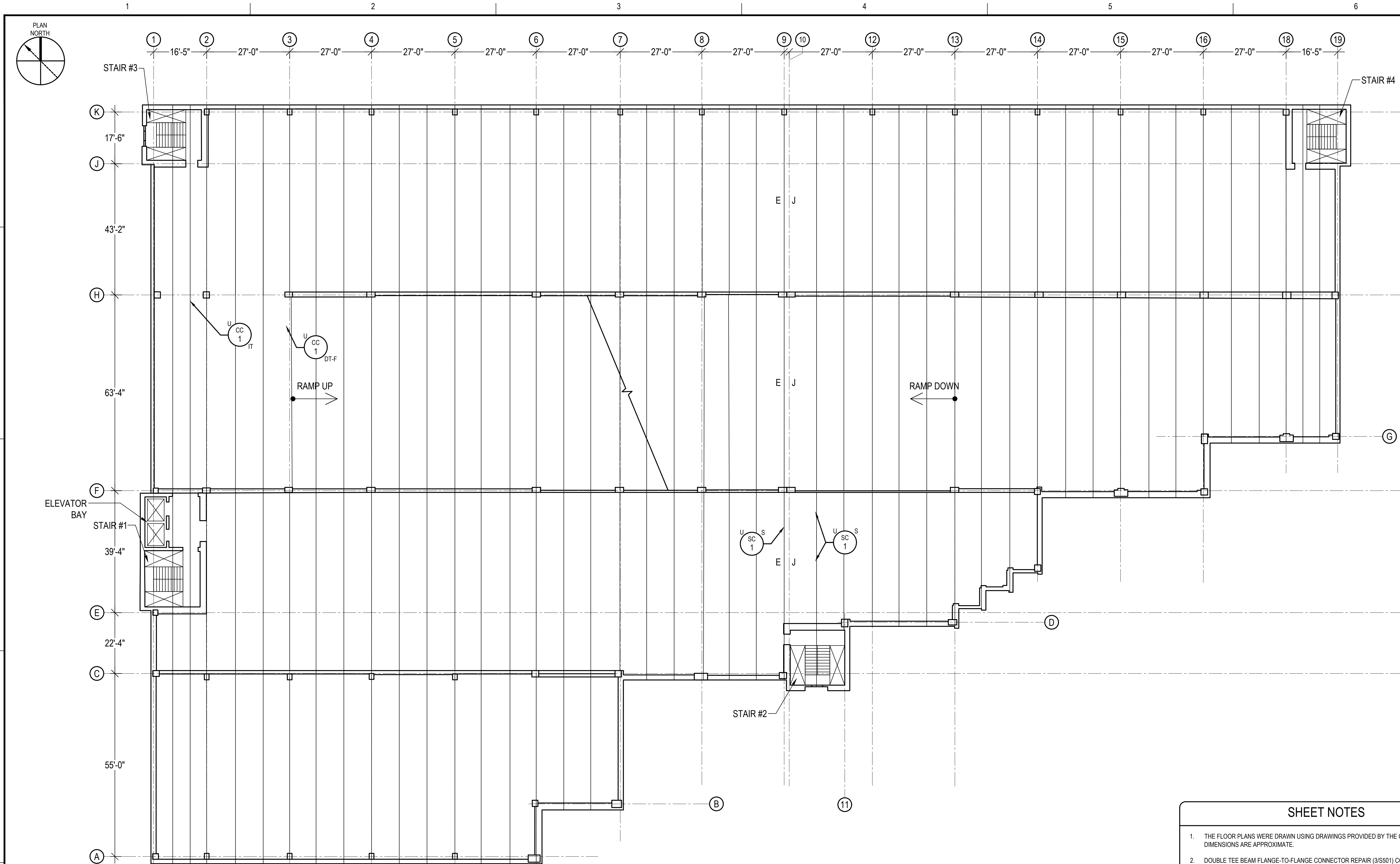
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DRAWN BY	KMC		
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE
GEORGE A. AYOTTE GARAGE FOURTH FLOOR PLAN

DRAWING NO.
S120



UNDERSIDE OF FIFTH FLOOR PLAN
(FOURTH LEVEL LOOKING UP)

1
S121
SCALE: NOT TO SCALE

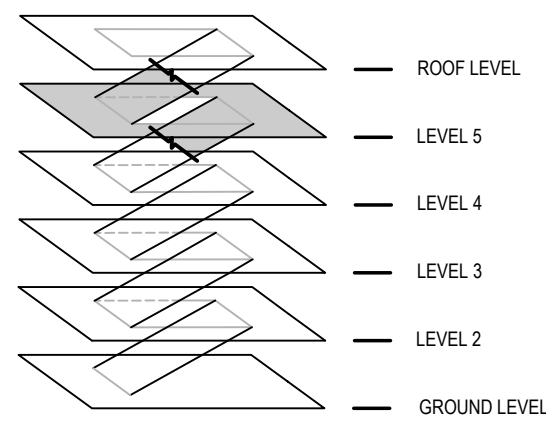
REPAIR LEGEND					
CONCRETE/STONE			METAL PANEL		MASONRY
<div>CC #</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502
<div>DC #</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>DMP S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
			EXPANSION JOINTS & JOINT SEALANTS		
			SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.		
			<div>E J</div>	EXPANSION JOINT	REFER TO DETAIL 9/S502
			<div>#</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED	
			<div>CB #</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED
			<div>STEP CRACK; # INDICATES LINEAR FEET</div>		TO BE REPLACED

SHEET NOTES

- THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.
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KEY PLAN

NOT TO SCALE



LEGEND:
GARAGE AREA
SHOWN ON THIS PLAN



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AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
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DATE	2/22/2022		
DRAWING SCALE			

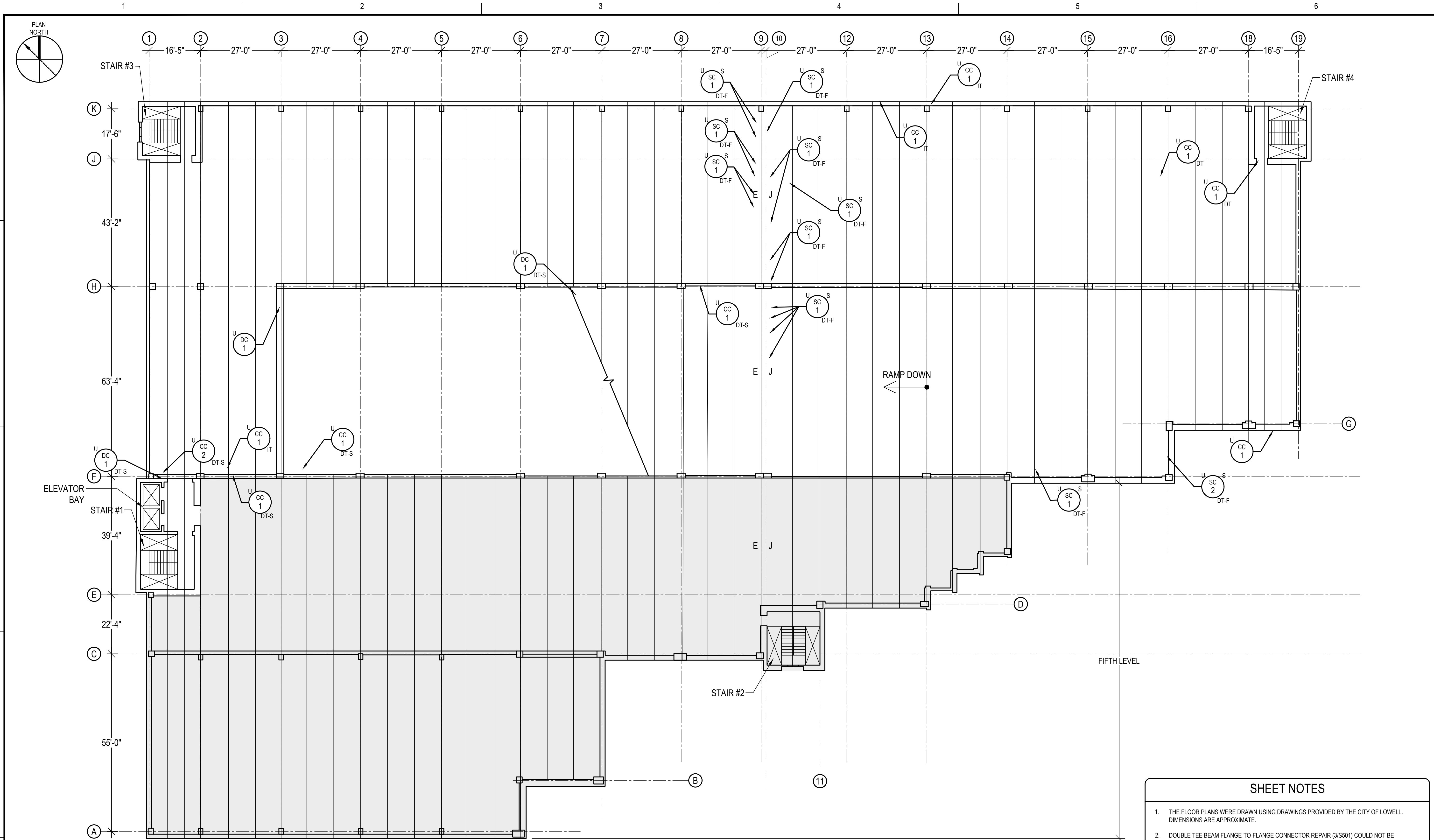
GRAPHIC SCALE

SHEET TITLE

GEORGE A.
AYOTTE GARAGE
UNDERSIDE OF
FIFTH FLOOR
PLAN

DRAWING NO.

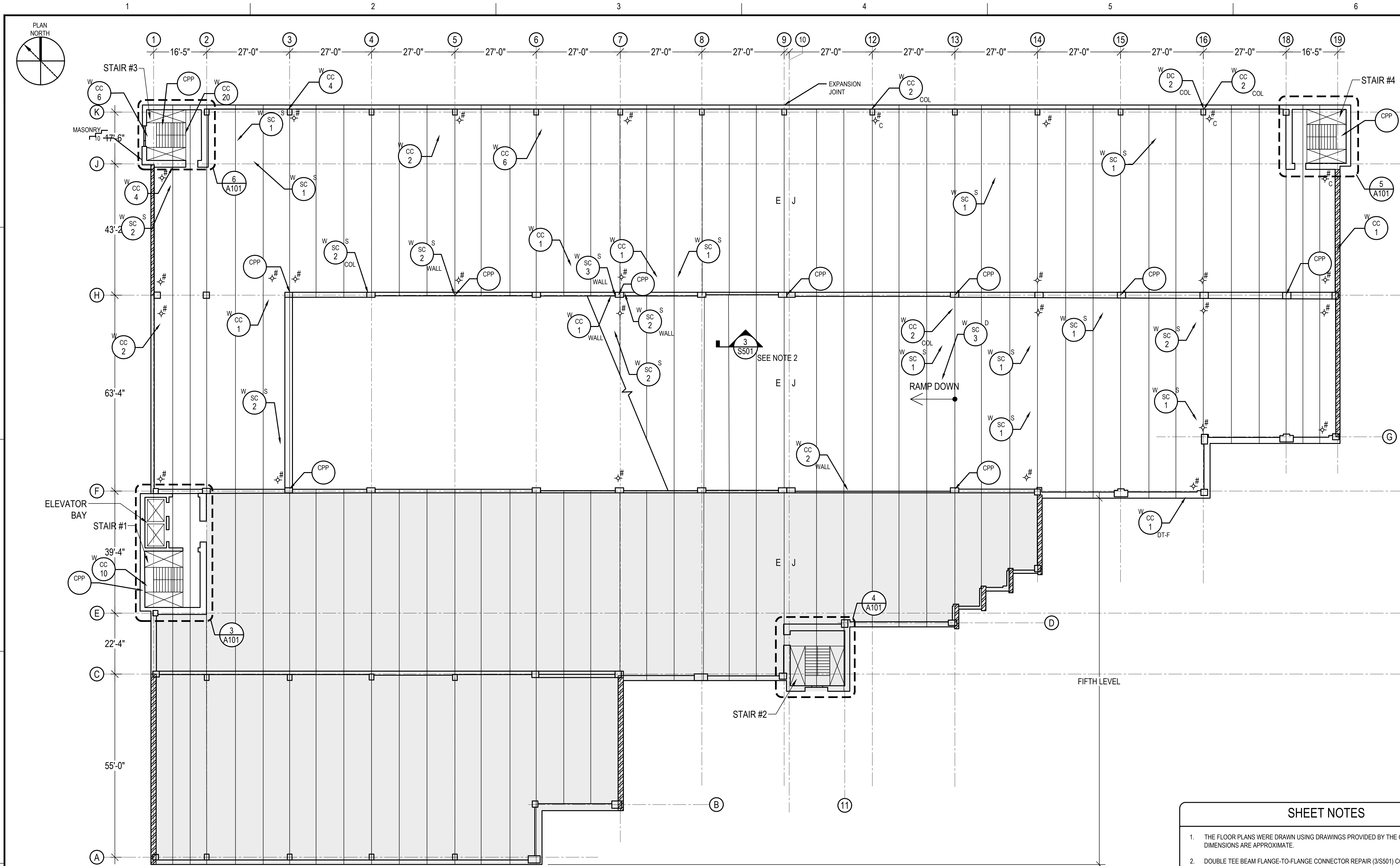
S121



UNDERSIDE OF ROOF FLOOR PLAN
(FIFTH LEVEL LOOKING UP)

1
S123
SCALE: NOT TO SCALE

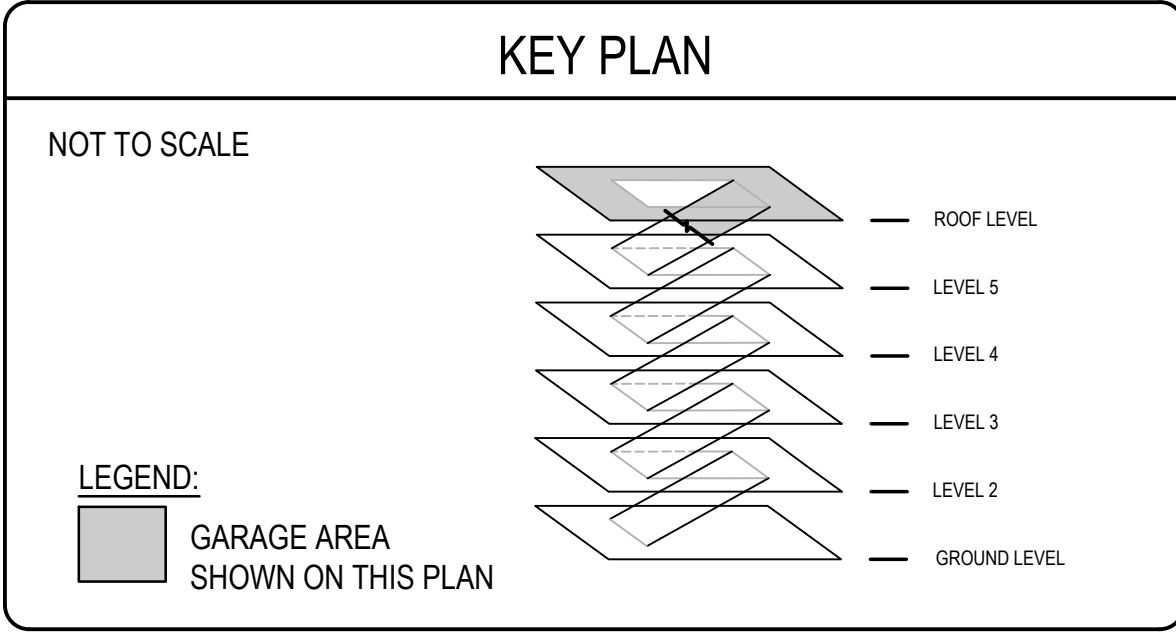
REPAIR LEGEND											
CONCRETE/STONE					METAL PANEL			MASONRY			
<div>CC #</div>	CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	<div>SC #</div>	SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	<div>DMP S</div>	DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED	<div>CB #</div>	CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED
<div>DC #</div>	DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	<div>✕ #</div>	DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED		EXPANSION JOINTS & JOINT SEALANTS			<div>⏏ #</div>	STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED
						SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 3&7/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.					
						E J EXPANSION JOINT					



1
S124
SIXTH FLOOR ROOF PLAN
SCALE: NOT TO SCALE

REPAIR LEGEND			
CONCRETE/STONE		METAL PANEL	
CC # CRACKED CONCRETE; # INDICATES LINEAR FEET W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 4/S501 5/S501	DMP S DEFORMED METAL PANEL; S = SEVERE DEFORMATION	TO BE REPLACED
DC # DELAMINATED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW DELAMINATION D = DEEP DELAMINATION T = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501	EXPANSION JOINTS & JOINT SEALANTS	
SC # SPALLED CONCRETE; # INDICATES SQUARE FEET S = SHALLOW SPALL D = DEEP SPALL FD = FULL DEPTH IT = INVERTED TEE BEAM DT-F = DOUBLE TEE FLANGE DT-S = DOUBLE TEE STEM W = WEARING SURFACE U = UNDERSIDE	REFER TO REPAIR DETAIL: 1/S501 2/S501 11/S502	SEALANTS AT ALL PRECAST CONCRETE JOINTS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DETAIL 387/S501. TOTAL JOINT SEALANT LENGTH TO BE REMOVED AND REPLACED SHALL BE 95,000 LINEAR FEET AT THE AYOTTE GARAGE.	
# DAMAGED DRAIN; R INDICATES TO BE REMOVED C INDICATES TO BE CLEANED		E J EXPANSION JOINT	REFER TO DETAIL 9/S502
MASONRY		MISCELLANEOUS	
CB # CRACKED BRICK; # INDICATES UNITS	TO BE REPLACED	CPP CLEAN, PRIME AND PAINT; RAILINGS, UNDERSIDE OF ALL STAIRS, DOORS, DOOR FRAMES AND LIGHT POLES. REFER TO SPEC 09 90 00.	
# STEP CRACK; # INDICATES LINEAR FEET	TO BE REPLACED	GARAGE AREA EXTENTS OF FIFTH LEVEL WEARING SURFACE. REFER TO WEARING SURFACE PLAN ON S122 FOR DEFECTS.	
# EXISTING CAPSTONES TO BE REMOVED AND RE-SECURED WITH FLASHING PER REPAIR DETAIL 2/A701			

SHEET NOTES			
1.	THE FLOOR PLANS WERE DRAWN USING DRAWINGS PROVIDED BY THE CITY OF LOWELL. DIMENSIONS ARE APPROXIMATE.		
2.	DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTOR REPAIR (3/S501) COULD NOT BE QUANTIFIED DURING THE FIELD EVALUATION AS THE CONNECTIONS ARE CONCEALED BY THE EXISTING JOINT SEALANT. CONTRACTOR TO ASSUME THAT 5,702 OF DOUBLE TEE BEAM FLANGE-TO-FLANGE CONNECTORS SHALL BE REPAIRED IN THE AYOTTE GARAGE.		



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PROJECT
RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

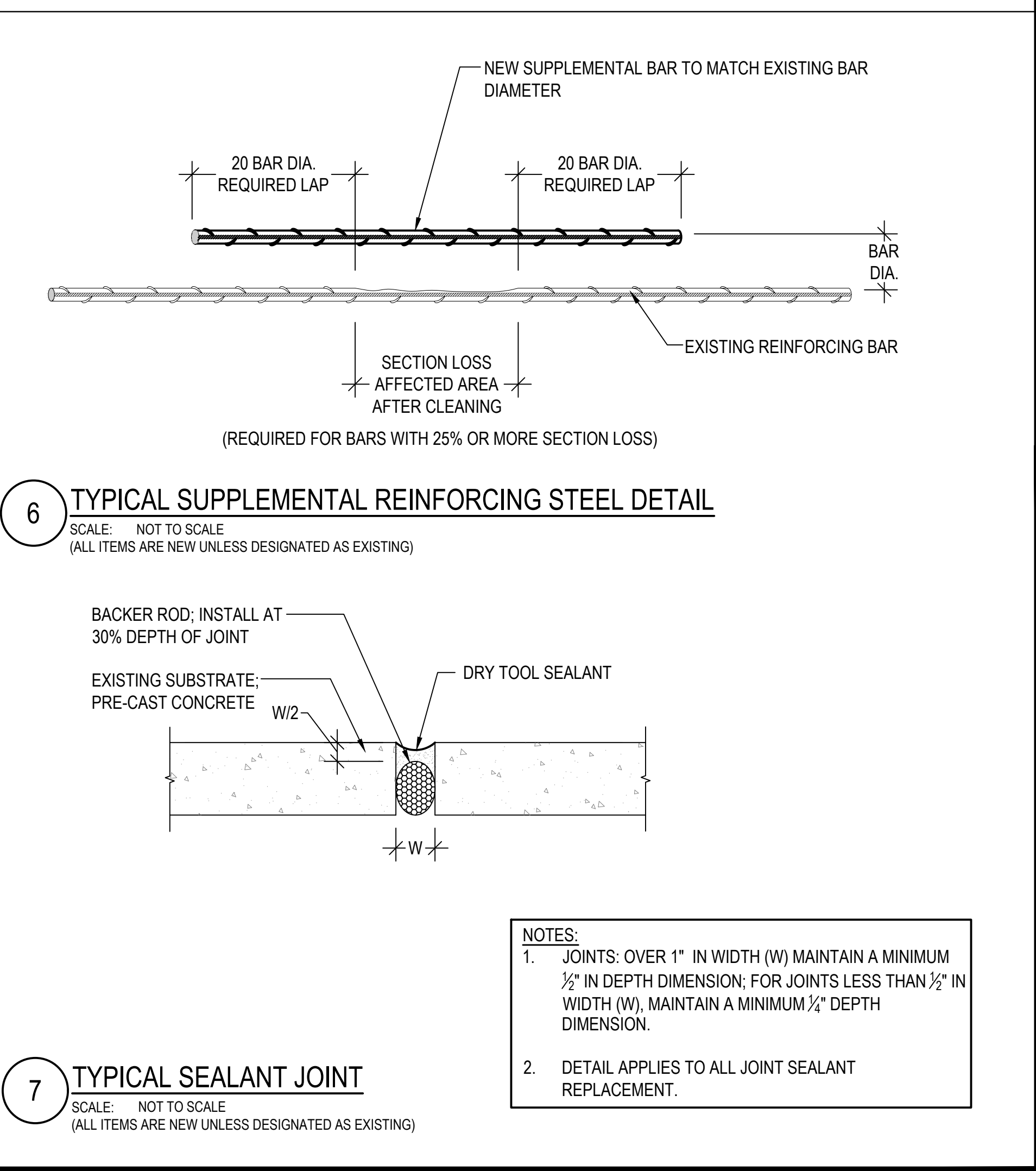
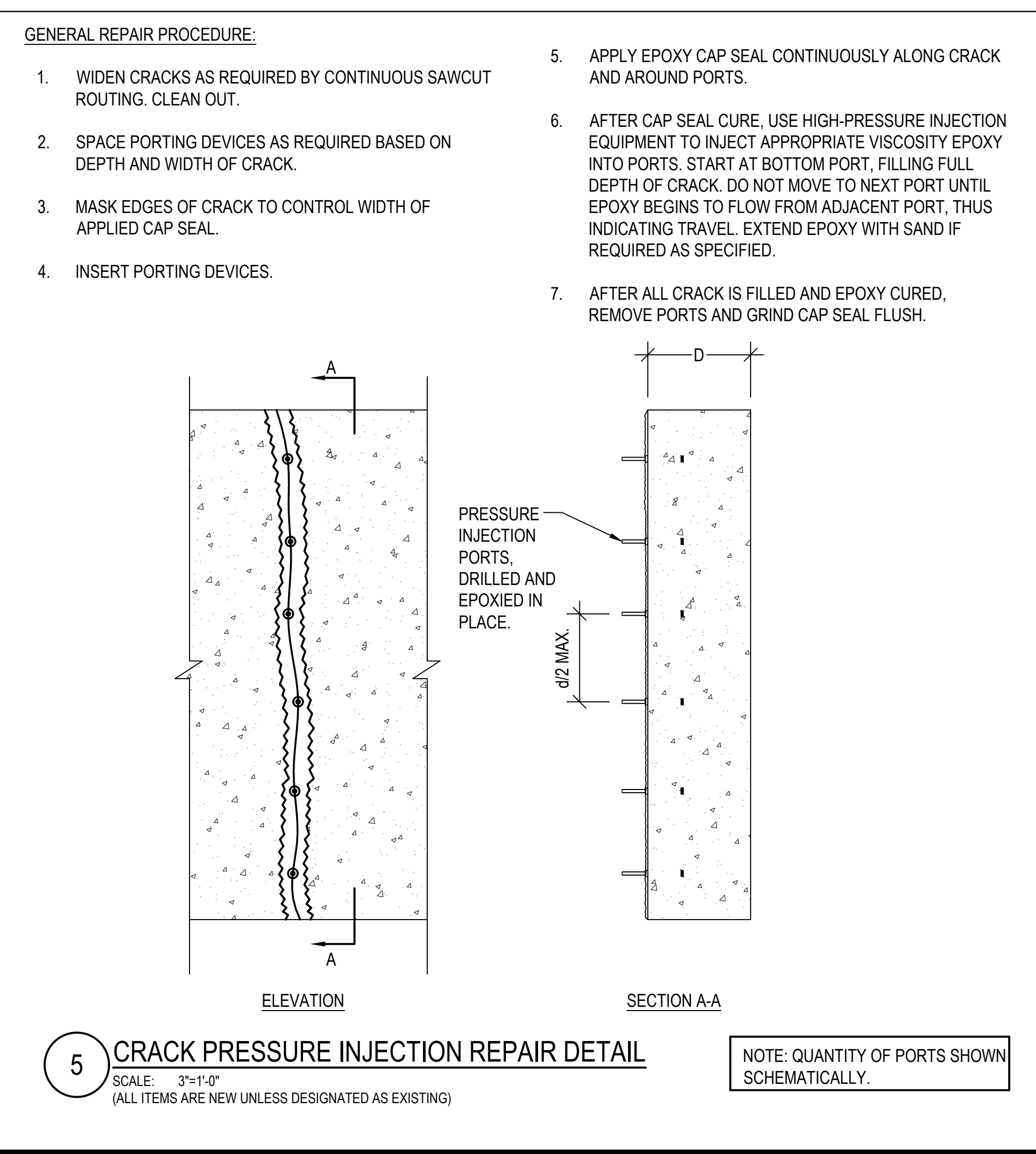
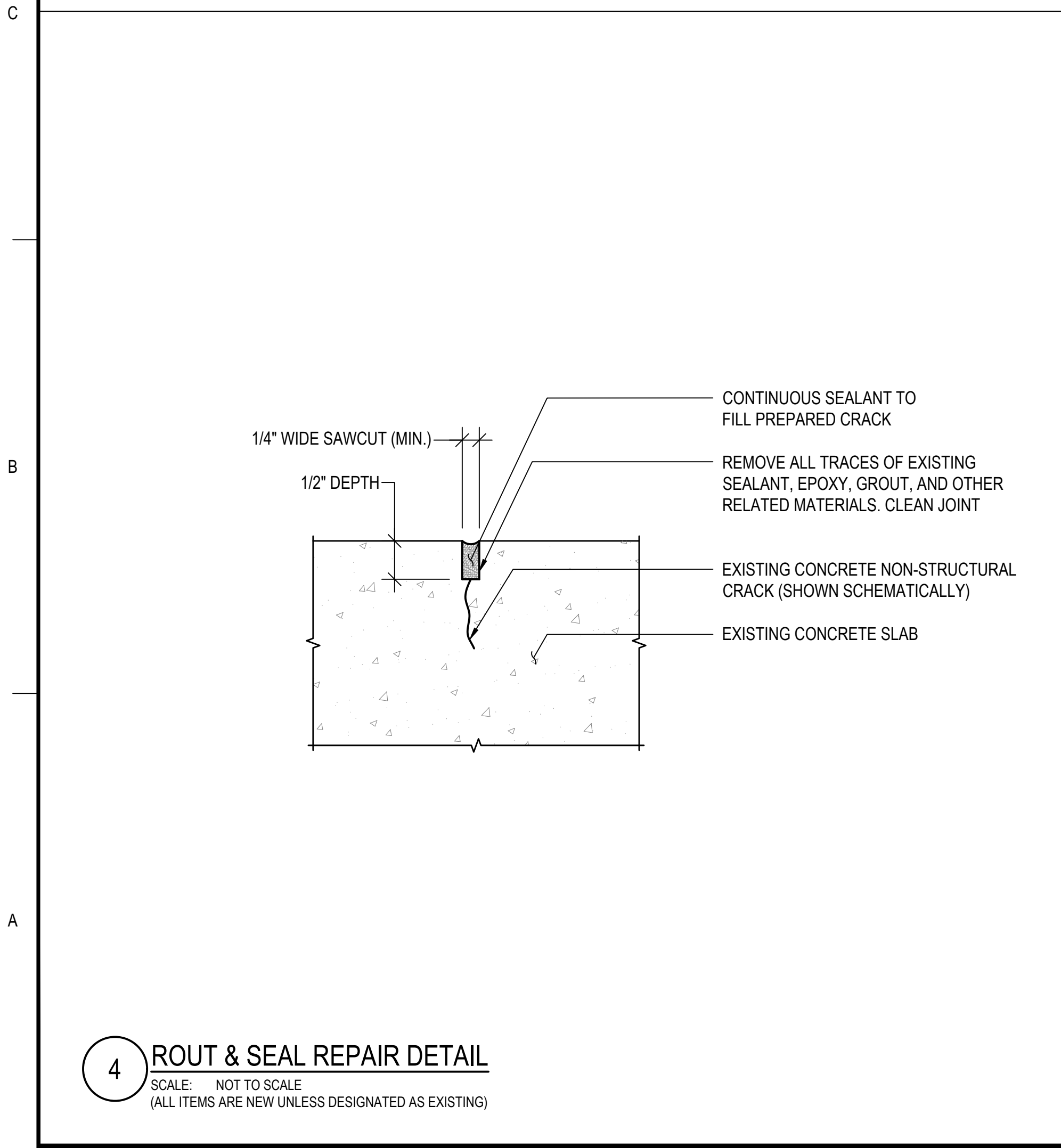
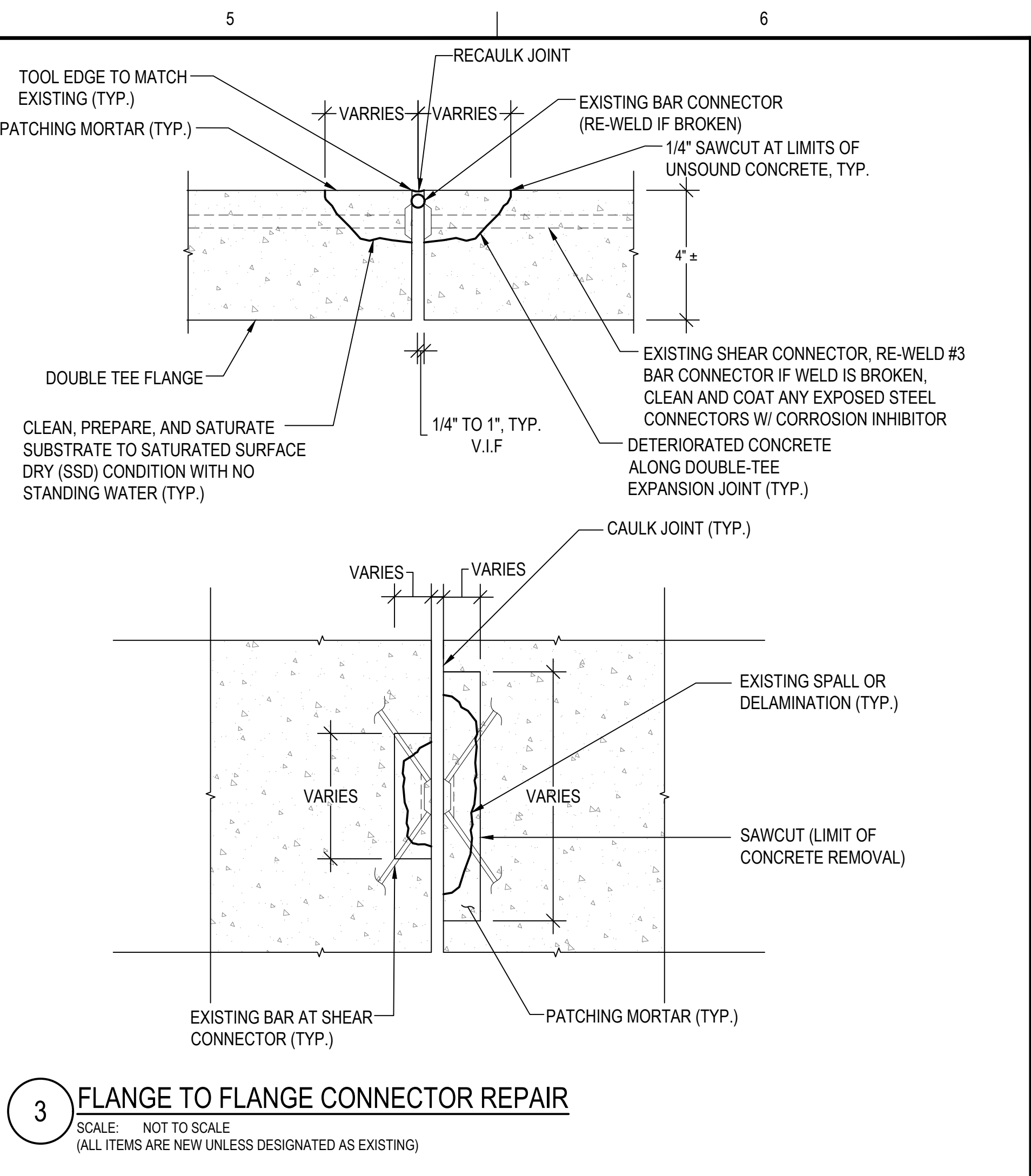
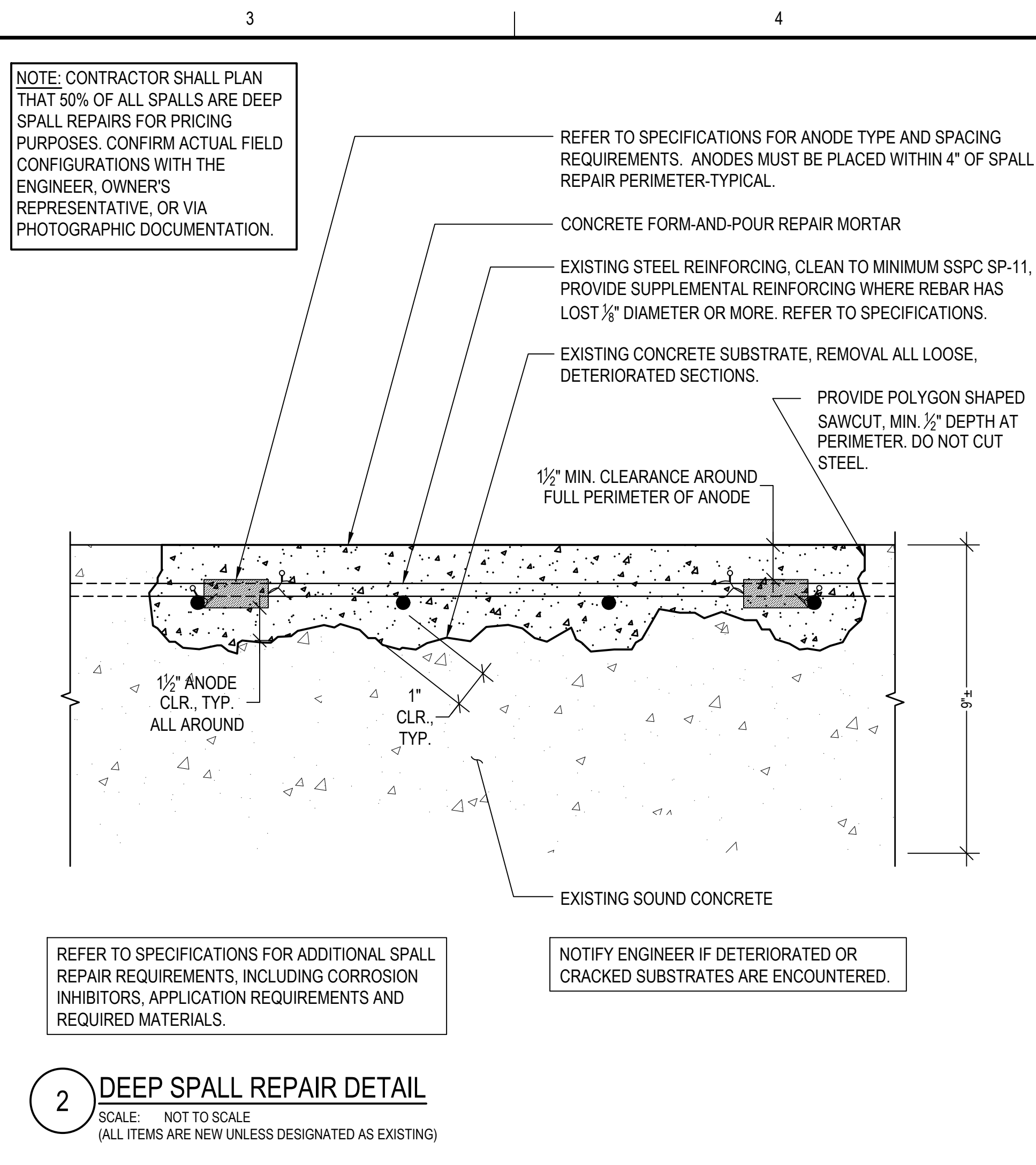
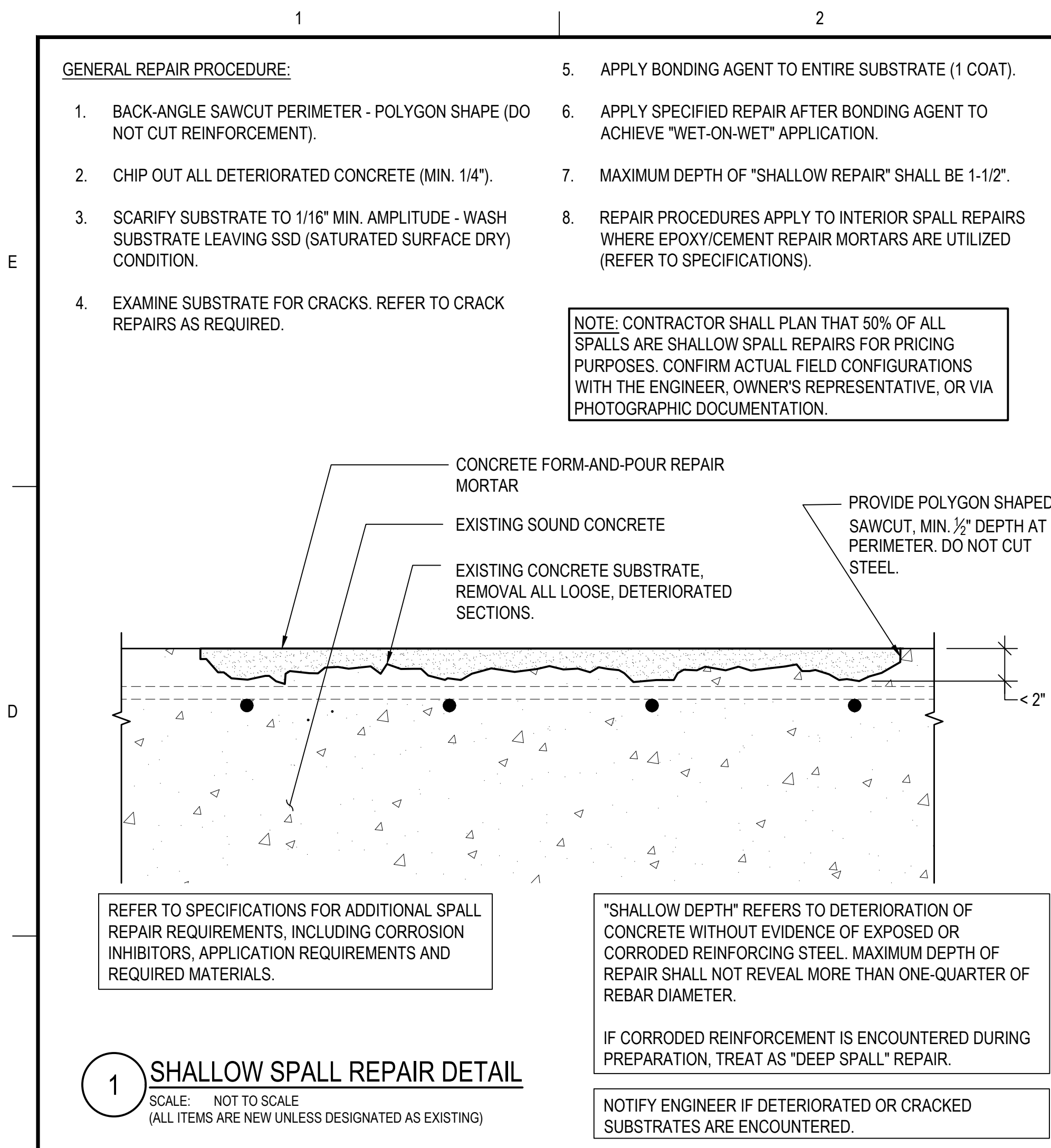
NO.	DATE	DESCRIPTION	BY
PROJECT NO.	837920		
CADD FILE	837920 S100s		
DESIGNED BY			
DRAWN BY			
CHECKED BY	AEI/ACP		
DATE	2/22/2022		
DRAWING SCALE			

GRAPHIC SCALE

SHEET TITLE

GEORGE A. AYOTTE GARAGE SIXTH FLOOR ROOF PLAN

DRAWING NO.
S124



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PROJECT: RENOVATION AND REPAIR OF GEORGE A. AYOTTE AND JOSEPH M. DOWNES PARKING FACILITIES IN LOWELL, MA
OWNER: CITY OF LOWELL
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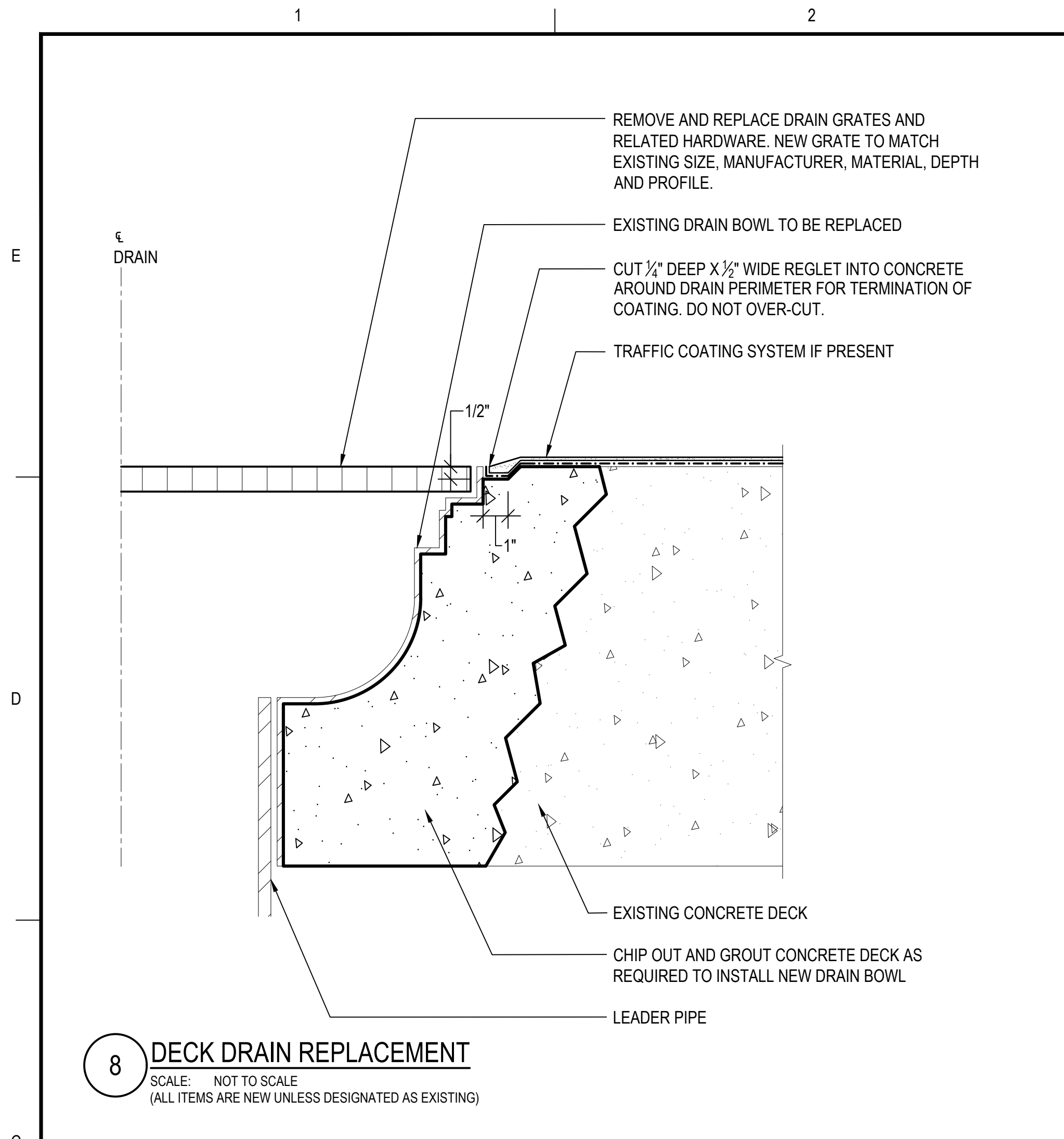
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DATE	2/22/2022		
DRAWING SCALE	AS NOTED		

GRAPHIC SCALE

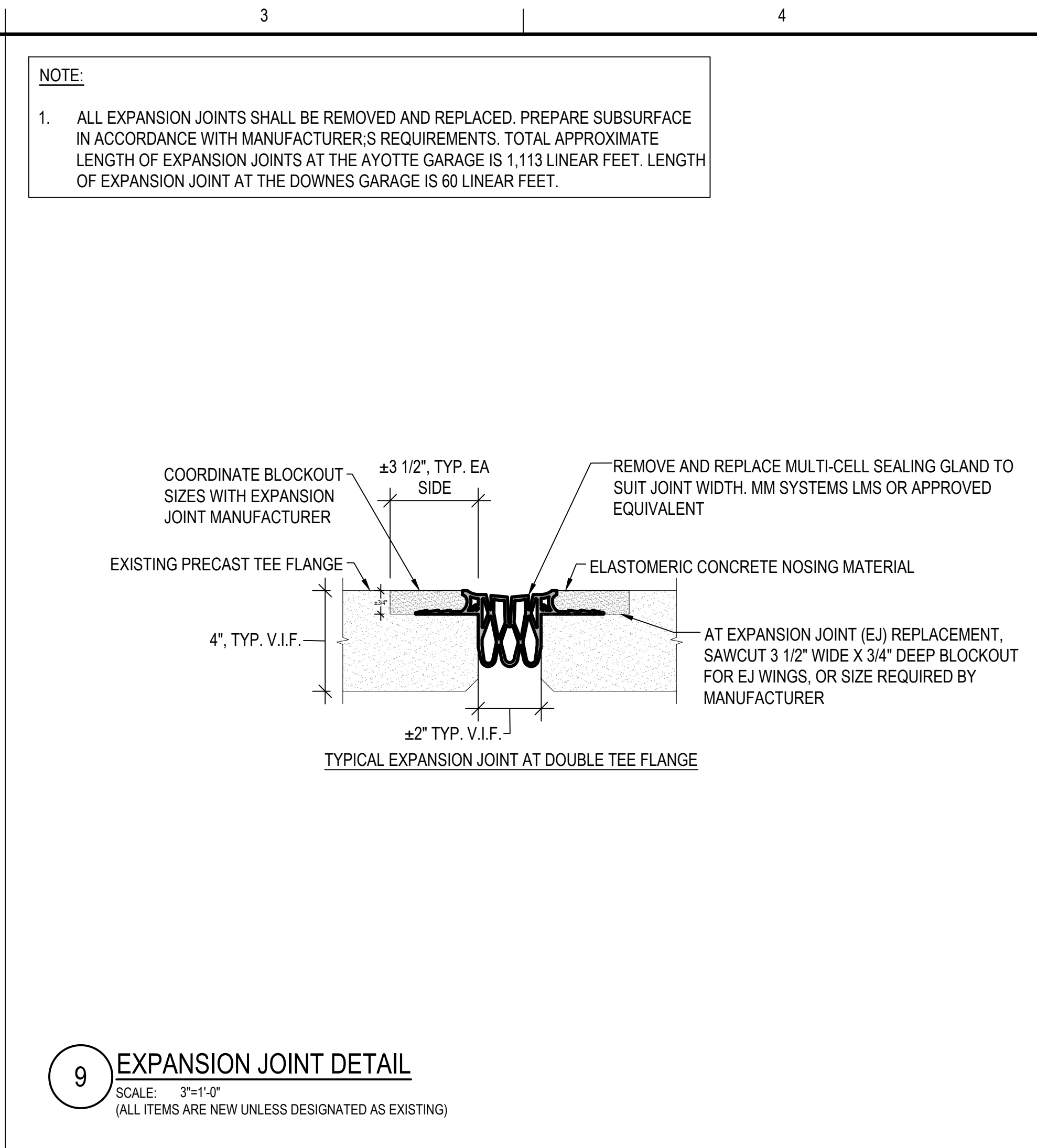
SHEET TITLE

STRUCTURAL DETAILS

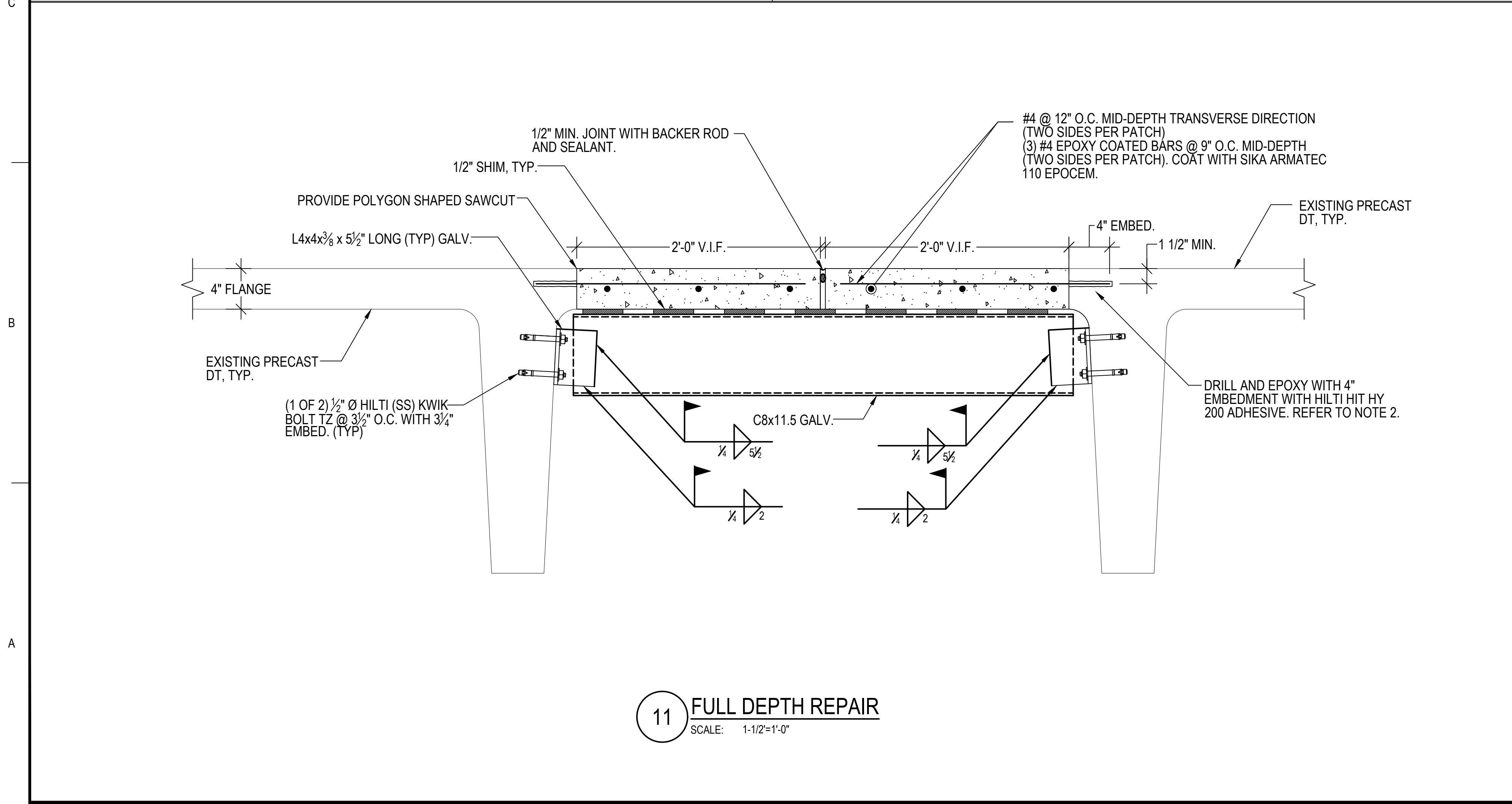
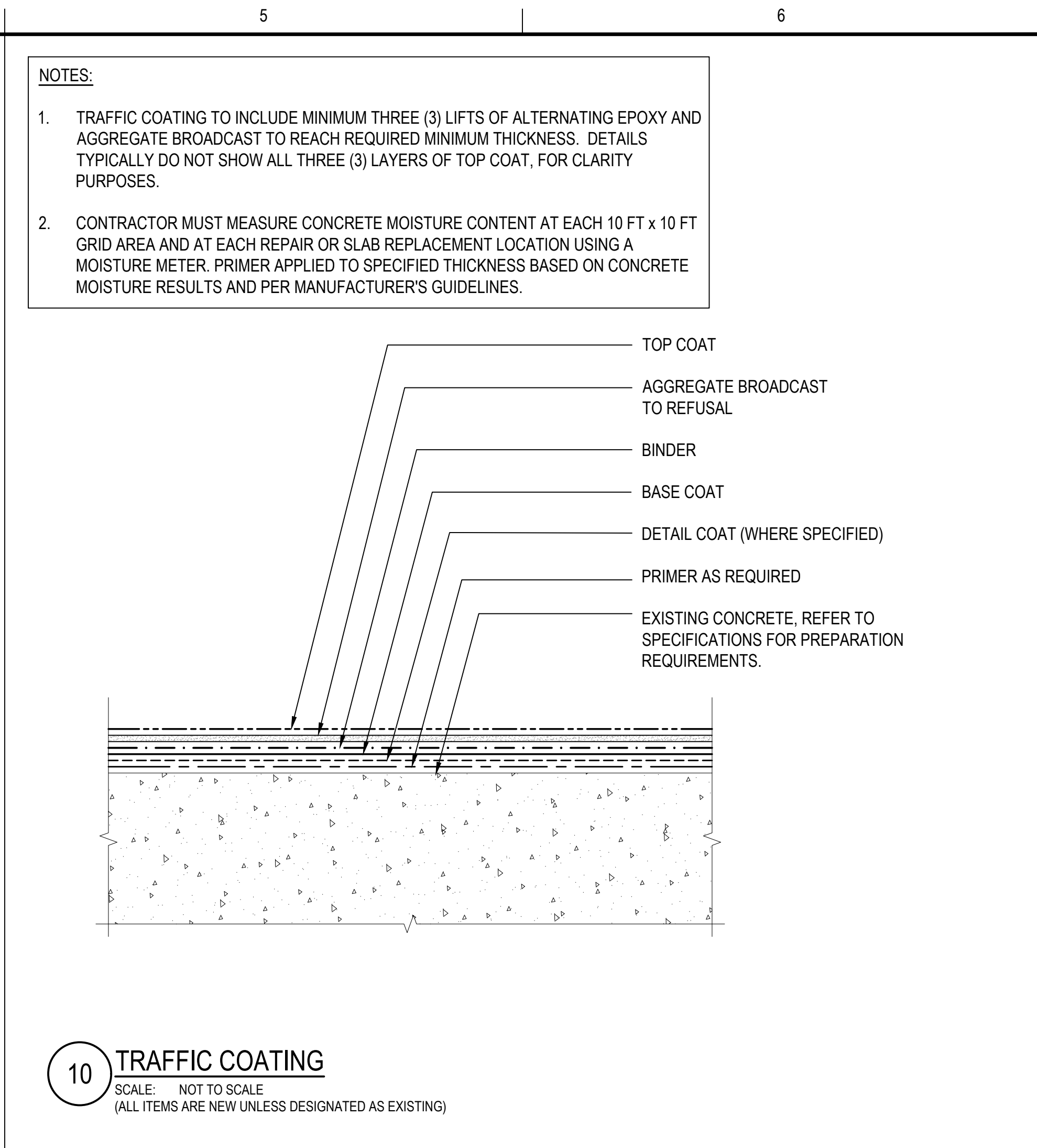
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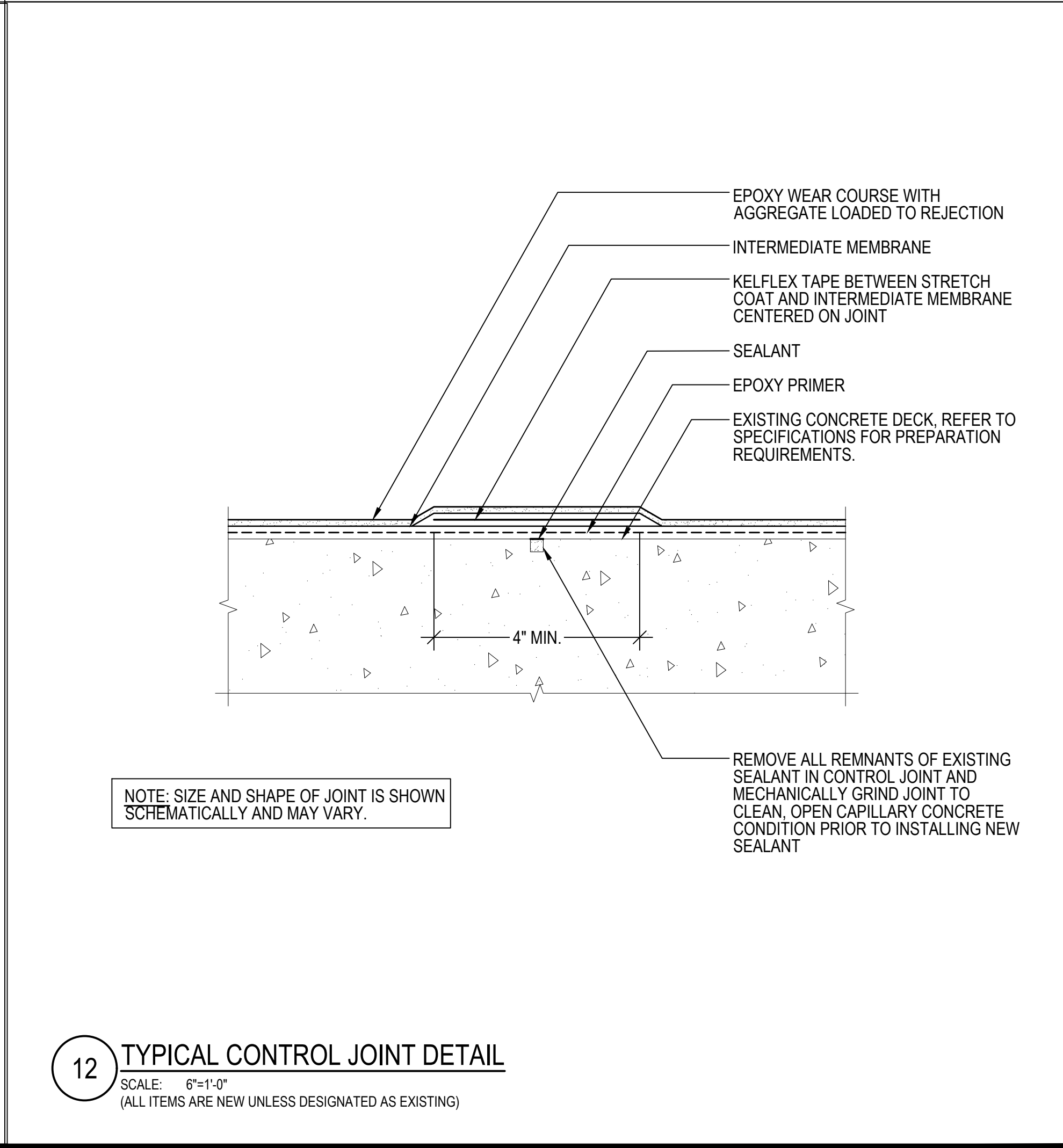
8 DECK DRAIN REPLACEMENT
SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



9 EXPANSION JOINT DETAIL
SCALE: 3\"/>



11 FULL DEPTH REPAIR
SCALE: 1-1/2\"/>



12 TYPICAL CONTROL JOINT DETAIL
SCALE: 6\"/>

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DRAWING SCALE	AS NOTED		

GRAPHIC SCALE

SHEET TITLE

STRUCTURAL
DETAILS

DRAWING NO.

S502



SCALE: 6"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



SCALE: 1'-0"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



SCALE: 1'-0"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



SCALE: 6"=1'-0"
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

- SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)

SCALE: NOT TO SCALE
(ALL ITEMS ARE NEW UNLESS DESIGNATED AS EXISTING)



SHORING LOADS

1. THE LOAD PROVIDED ARE FOR THE END REACTIONS OF THE MEMBERS AND ARE NOT THE FULL DEAD LOADS AND LIVE LOADS SUPPORTED BY THE ENTIRE MEMBER. THE LOADS PROVIDED ARE INTENDED TO BE UTILIZED BY THE SHORING CONTRACTOR, IN CONJUNCTION WITH A FACTOR OF SAFETY INCORPORATED BY THE SHORING CONTRACTOR, TO TEMPORARILY SUPPORT THE PARKING STRUCTURE DURING CONSTRUCTION.
2. THE LOADS PROVIDED ARE SERVICE LEVEL LOADS AND ARE NOT FACTORED.
3. VEHICLE LIVE LOADS ARE INCLUDED SEPARATELY FROM THE DEAD LOADS. THE CITY OF LOWELL HAS INDICATED THAT THE CONTRACTOR SHALL MAKE EVERY EFFORT TO KEEP THE GARAGE OPEN FOR PARKING PATRONS, SO LIVE LOAD SHALL BE USED FOR THE SHORING DESIGN.
4. SNOW LOADS ARE NOT INCLUDED. IF SHORING TO REMAIN IN PLACE DURING A SNOW EVENT, THERE SHALL BE NO PARKING ALLOWED AT THE ROOF LEVEL TO ACCOUNT FOR THE INCREASE IN LOADING IMPOSED BY SNOW.
5. THE DOUBLE TEE BEAM STEM LOADS AND INVERTED TEE BEAM GIRDER LOADS ARE PROVIDED IN TWO DIFFERENT WAYS FOR THE SHORING CONTRACTOR TO UTILIZE IN THE SHORING DESIGN. IN SOME CASES, DOUBLE TEE BEAMS MAY BE SHORED DIRECTLY, FLOOR TO FLOOR, DOWN TO THE GROUND LEVEL. IN OTHER CASES, THE INVERTED TEE BEAMS MAY BE SHORED DIRECTLY FROM FLOOR TO FLOOR WHILE SUPPORTING THE DOUBLE TEE BEAMS.

DOUBLE TEE STEM LOADS (LOADS PER STEM PER LEVEL):

DEAD LOAD: $DL_{DTSTEM} = 15,100 \text{ LB/LEVEL}$

LIVE LOAD: $LL_{DTSTEM} = 7,200 \text{ LB/LEVEL}$

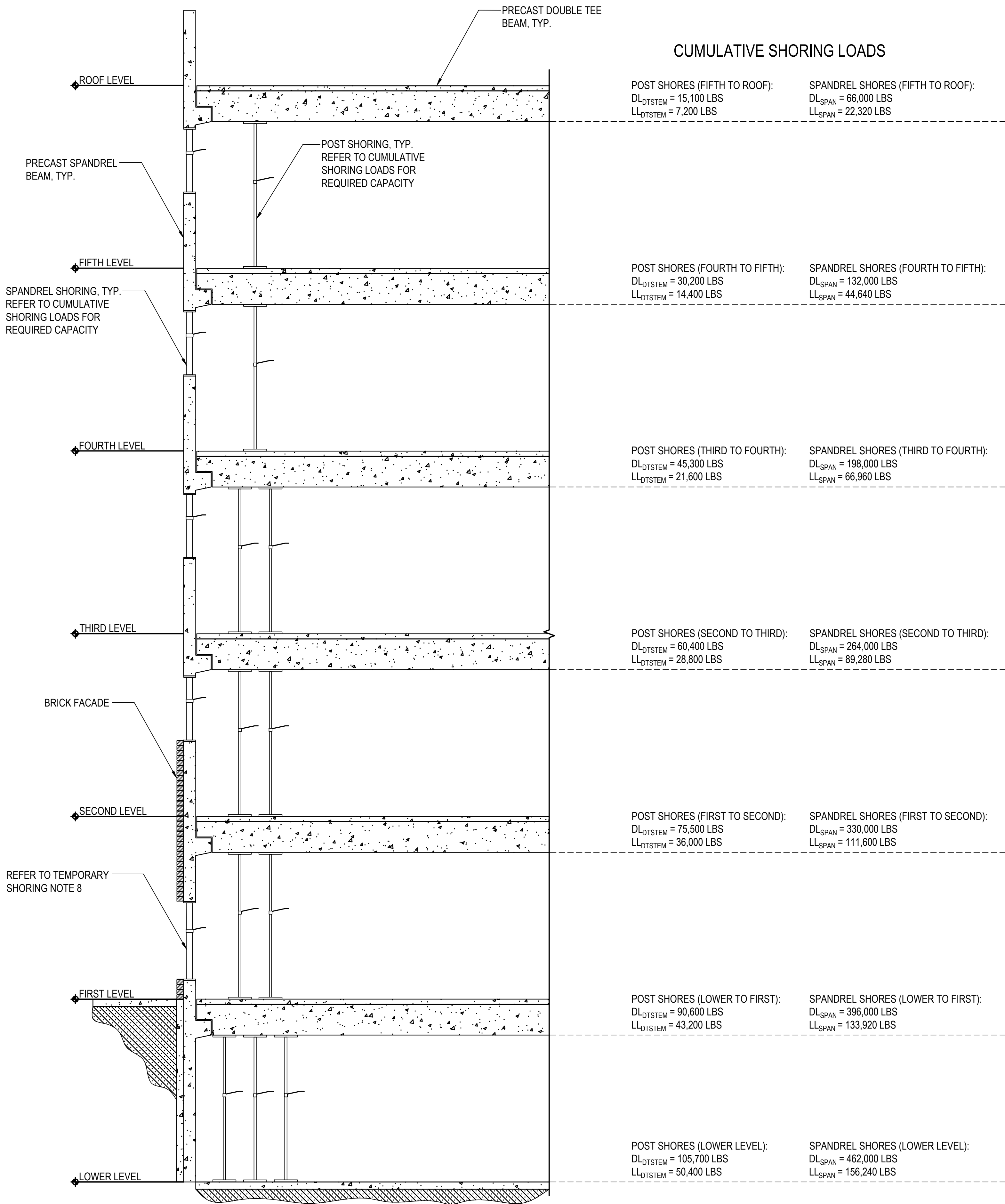
SPANDREL LOADS (LOAD PER SPANDREL PER LEVEL):

DEAD LOAD: $DL_{SPAN} = 66,000 \text{ LB/LEVEL}$

LIVE LOAD: $LL_{SPAN} = 22,320 \text{ LB/LEVEL}$

TEMPORARY SHORING NOTES

1. THE SHORING CONTRACTOR MUST PROVIDE TEMPORARY SHORING SUPPORT OR SHORING AS REQUIRED TO PERFORM STRUCTURAL REPAIRS NOTED ON THESE DRAWINGS. ALL MEANS AND METHODS TO ACCOMPLISH THE INSTALLATION OF THE SHORING IS THE SOLE RESPONSIBILITY OF THE SHORING CONTRACTOR.
2. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO THE PERFORMANCE OF ANY WORK SHOWING THE LOCATION, SIZE, DIMENSIONS, CAPACITY, DETAIL, WEIGHT, EQUIPMENT, ETC. OF ALL SUPPORTING MEMBERS AS WELL AS A TIME SCHEDULE AND SEQUENCE OF WORK INDICATING WHEN ALL PERTINENT ITEMS OF WORK WILL BE PERFORMED.
3. THE CONTRACTOR MUST SUBMIT DESIGN CALCULATIONS, SIGNED-AND-SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF MASSACHUSETTS, TO THE ENGINEER FOR REVIEW PRIOR TO OR INCLUSIVE WITH, SHOP DRAWINGS.
4. NO CONSTRUCTION WORK WILL COMMENCE UNTIL THE ENGINEER HAS REVIEWED THE SHORING SHOP DRAWINGS AND DESIGN CALCULATIONS.
5. CONTRACTOR MUST PROVIDE ADEQUATE LATERAL BRACING. ALL SHORING MUST BE CONTINUOUS THROUGH THE FLOOR LEVELS AND/OR SOLIDLY BLOCKED BETWEEN FLOORS. ALL SHORES MUST BE CARRIED DOWN TO FIRM BEARING MATERIAL AND THE LOAD MUST BE ADEQUATELY SPREAD OUT IF SUPPORTED ON THE EXISTING SLAB-ON-GRADE.
6. ANY DEFICIENCIES OR DAMAGE AS A RESULT OF SHORING SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE RESTORED TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
7. DESIGN, CONSTRUCTION, AND MAINTENANCE OF TEMPORARY SHORING MUST ALLOW FOR ONE-LANE OF TRAVEL AT GARAGE FLOORS TO BE MAINTAINED AT ALL TIMES. THE GARAGE WILL REMAIN OPEN THROUGHOUT THE DURATION OF THE CONSTRUCTION.
8. EXISTING DECORATIVE METAL FRAMES MAY NEED TO BE REMOVED TO INSTALL SHORING. SHORING DESIGNER TO EVALUATE. GC TO INCORPORATE REMOVAL AND REINSTALLATION OF FRAMES AS REQUIRED BY THE SHORING DESIGN.



TEMPORARY SHORING

SCALE: NOT TO SCALE



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FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

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NO.	DATE	DESCRIPTION	BY

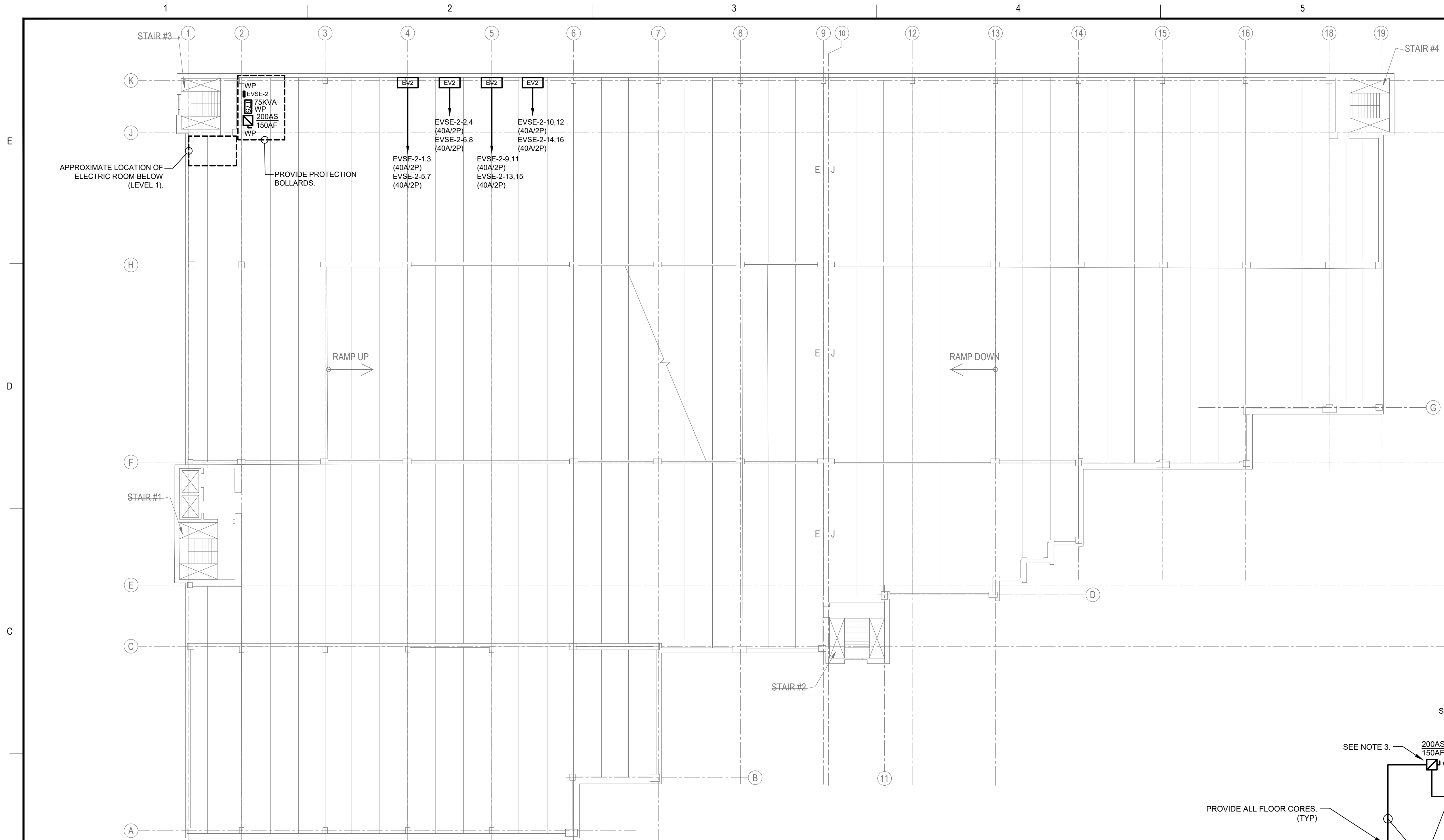
PROJECT NO.	837920
CADD FILE	
DESIGNED BY	
DRAWN BY	MSL/JVL
CHECKED BY	AEO/IACP
DATE	2/22/2022
DRAWING SCALE	NOT TO SCALE

GRAPHIC SCALE

SHEET TITLE

JOPSEPH M. DOWNES
GARAGE
TEMPORARY SHORING
DETAIL

DRAWING NO.
S504



ELECTRIC VEHICLE CHARGING STATIONS:

1. PROVIDE ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) AND INTERNAL GATEWAYS FOR CONNECTIVITY.
2. PROVIDE FOUR (4) DUAL-PORT EVSE STATIONS TO SERVICE 8 VEHICLES LOCATED AT LEVEL 2 WITHIN THE GARAGE. THE EVSE SHALL MATCH THE EXISTING CHARGEPORT+ #CPC1-CT4021 DUAL PEDESTAL MOUNT AND CORD MANAGEMENT KIT WITH INTERNAL GFCI PROTECTION. WHERE CONDUITS CAN BE IN CONTACT WITH VEHICLES, CONDUIT PROTECTION SHALL BE PROVIDED. PROVIDE STEEL PROTECTION BOLLARDS FOR EACH EVSE.
3. PROVIDE TWO (2) 40A-2P CIRCUIT BREAKERS AND 4#6 (CU) & 1#6G (CU) IN RIGID METAL CONDUIT 1" C (RMC) FROM 208V PANELBOARD "EVSE-2" TO EACH DUAL-PORT EVSE STATION.



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100% SUBMISSION

PROJECT
RENOVATION AND REPAIR OF GEORGE A.
AYOTTE AND JOSEPH M. DOWNES PARKING
FACILITIES IN LOWELL, MA

OWNER
CITY OF LOWELL
CITY HALL, 375 MERRIMACK ST., 3RD FLOOR
LOWELL, MA 01852

NO.	DATE	DESCRIPTION	BY

PROJECT NO.	837920
CADD FILE	
DESIGNED BY	GCH
DRAWN BY	ZWP
CHECKED BY	GCH
DATE	02/14/2022
DRAWING SCALE	1/16"=1'0"

GRAPHIC SCALE

SHEET TITLE

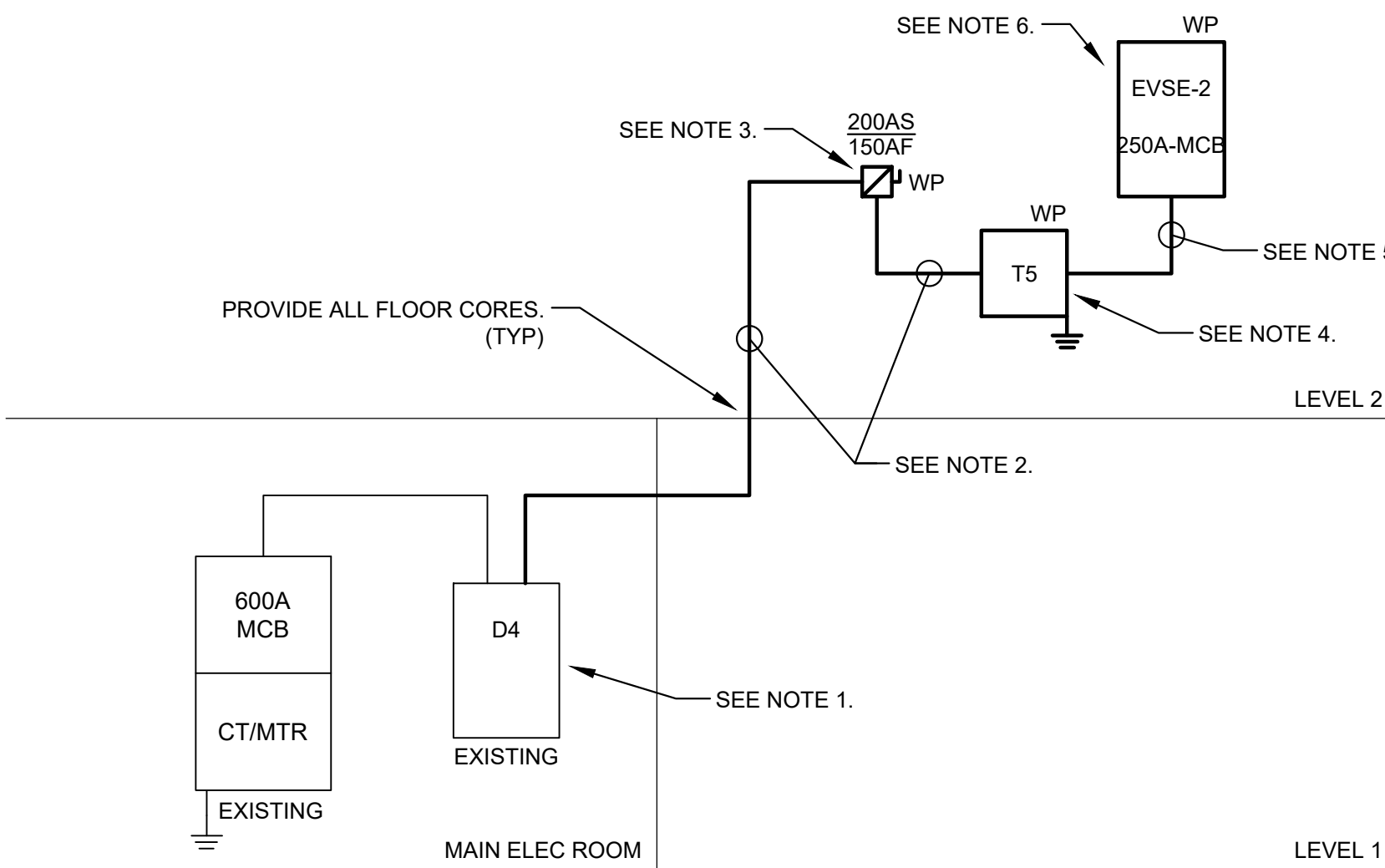
AYOTTE GARAGE -
LEVEL 2 -
ELECTRICAL PLAN

DRAWING NO.

E102

DRY TYPE TRANSFORMER SCHEDULE								
SIZE	KVA	PRIMARY AMPS	SECONDARY AMPS	480 VOLT OVERCURRENT	208VOLT (4) OVERCURRENT	480V FEEDER	120V / 208V FEEDER	GROUNDING NOTE SEE NOTE# 5
T5	75	90	208	150A-3P	250A-3P	3#1/0 & 1#6G-1 1/2".	4#250 KCMIL & 1#2G.-3".	1#2 - 3/4"
TRANSFORMER NOTES: 1. BOND AND GROUND TRANSFORMER PER NEC ARTICLE 250.30. 2. CONNECT TRANSFORMER GROUNDING ELECTRODE CONDUCTOR TO NEAREST GROUNDING ELECTRODE (BUILDING STEEL, GROUND ROD, OR METAL WATER PIPE). 3. ALL CONDUCTOR SIZES ARE FOR COPPER CONDUCTORS, NEC TABLE 310.16. 4. SECONDARY OVERCURRENT PROTECTION SHALL BE LOCATED WITHIN TEN (10) FEET OF THE TRANSFORMER SECONDARY TERMINALS EITHER IN A PANELBOARD (MAIN BREAKER) OR A INDIVIDUALLY MOUNTED CIRCUIT BREAKER. 5. TRANSFORMER BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR. 6. 600KCMIL CONDUCTORS AND LARGER SHALL BE PROVIDED WITH MAC ADAPTERS AS REQUIRED TO COORDINATE WITH BREAKER LUG SIZES.								

SCHEDULE OF PANELBOARDS (208 / 120 VOLT, 3 PHASE, 4 WIRE)																							
PANEL NAME	MAIN		MTG.	AIC RATING	TOTAL POLES	1 POLE CIRCUIT BREAKERS						2 POLE CIRCUIT BREAKERS						3 POLE CIRCUIT BREAKERS					
	MCB	MLO				20A	20A GF	30A	40A	50A	60A	15A	20A	30A	40A	50A	60A	15A	20A	30A	40A	50A	60A
	EVSE-2	250A		S	30											8							



ELECTRICAL CONTRACTOR SHALL PROVIDE THE FOLLOWING:

1. REMOVE EXISTING 50A/3P CIRCUIT BREAKER AND PROVIDE NEW 150A/3P CIRCUIT BREAKER IN DISTRIBUTION PANEL "D4".
2. PROVIDE PRIMARY (480V) FEEDER 3#1/0 (CU) & 1#6G (CU) IN RIGID METAL CONDUIT 1-1/2"C. (RMC)
3. PROVIDE NEMA 3R, 200AS/150AF DISCONNECT SAFETY SWITCH.
4. PROVIDE NEMA 3R, DOE 2016 75KVA DRY-TYPE TRANSFORMER AND 1#2 (CU) IN RIGID METAL CONDUIT 3/4"C (RMC) EQUIPMENT GROUND.
5. PROVIDE SECONDARY (208V) FEEDER 4#250KCMIL (CU) & 1#2G (CU) IN RIGID METAL CONDUIT 3"C. (RMC)
6. PROVIDE NEMA 3R, 250A MCB, 208Y/120V, 3-PHASE, 4-WIRE, 30-CKT PANELBOARD WITH (8) 40A/2P CIRCUIT BREAKERS.

1 ELECTRICAL ONE-LINE RISER DIAGRAM
NTS



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